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ABSTRACT

A study investigated the attitudes of Japanese breastfeeding mothers in the South Bay area in Los Angeles. The sample consisted of 20 Japanese mothers over the age of 18 who were born in Japan, who recently came to the United States, and whose youngest child has been breastfed for at least 6 months. Subjects were interviewed in their native language. The results indicated that unrestricted breastfeeding, night nursing while co-sleeping, and long term breastfeeding were practiced. The mothers tended to choose breastfeeding as a matter of course and did not feel shy when nursing in public. They felt that breastfeeding was important for them. In addition, the study indicated some barriers that interfere with their breastfeeding practices, such as cultural and nutritional conflicts and conflicting advice from professionals. Results suggested that knowing the psycho-social obstacles to breastfeeding in the United States can facilitate breastfeeding among ethnic minorities, and that the understanding of culturally appropriate childrearing practices--such as unrestricted nursing, late weaning, and co-sleeping--may be needed among medical professionals as well as mental health professionals. (The survey questionnaire is appended. Contains approximately 110 references.) (AA)

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BREASTFEEDING PRACTICES OF JAPANESE MOTHERS IN THE SOUTH BAY AREA OF LOS ANGELES

A THESIS

Presented to the Department of Social Work

California State University, Long Beach

In Partial Fulfillment

of the Requirements for the Degree

Master of Social Work

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ABSTRACT

BREASTFEEDING PRACTICES OF JAPANESE MOTHERS
IN THE SOUTH BAY AREA OF LOS ANGELES

By

Hiroko Hongo
May 1994

The purpose of this study was to explore breastfeeding practices of Japanese mothers in the South Bay area of Los Angeles. The sample consisted of 20 Japanese mothers over the age of 18 who were born in Japan, who recently came to the US and whose youngest child has been breastfed for at least six months. The interview was conducted in Japanese language.

The result indicated that unrestricted breastfeeding, night nursing while co-sleeping and long term breastfeeding were practiced. The mothers tended to choose breastfeeding as a matter of course and not to feel shy when nursing in public. They felt that breastfeeding was important for them. This study indicated some barriers that interfere with their breastfeeding practices.

The results imply that mental health professionals may need to understand and be responsive to cultural practices. Implications for social work practice were drawn.

WE, THE UNDERSIGNED MEMBERS OF THE COMMITTEE,
HAVE APPROVED THIS THESIS

BREASTFEEDING PRACTICES OF JAPANESE MOTHERS
IN THE SOUTH BAY AREA OF LOS ANGELES

By

Hiroko Hongo

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May 1994

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I want to give thanks to God for sending my family to Long Beach where the wonderful curriculum for my life's work, Social Work, existed. While I had no reason to believe in me five years ago when I came to the US, I believed that God could help me to pursue my life's work if this work was a calling. Whenever I encountered obstacles, God gave me a path to overcome them. I thank Seiji and Kathy Oyama who gave me spiritual support.

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10. How many Japanese babies were given formula at the hospital? How many mothers received a sample of formula and used it later? How did they feel?

11. Have they had any problems related to breastfeeding? How did they overcome them?

12. Why do they think some people do not breastfeed?

13. What are Japanese feelings toward breastfeeding?

The researcher asked about their perception of the desirable duration of breastfeeding and the actual duration they breastfed in order to minimize any social desirability bias.

Sample

The sample of 20 Japanese mothers was made up those who were born in Japan, recently came to the US, live in the South Bay area in Los Angeles, and breastfed the youngest baby for more than 6 months. The researcher selected 6 months as a minimum because infants are ready to start solids around 6 months. The introduction of solid foods is the true beginning of weaning (Lawrence, 1980).

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CHAPTER 1
INTRODUCTION

The purpose of this study is to explore breastfeeding practices of Japanese mothers in the South Bay. Specifically, this study investigated Japanese breastfeeding mothers over the age of 18 who were born in Japan, who recently came to the US and whose youngest child has been breastfed for at least six months.

Recently, the advantages of breastfeeding have become more recognized throughout the world. The literature indicates that breastfeeding has many advantages not only for babies, but also for their mothers. The current target for the US population, as stated by the Surgeon General as part of the objectives for the year 2000, is to increase the population of mothers who breastfeed their babies to at least 75 percent in the early postpartum period and to increase the proportion who continue breastfeeding until their babies are five to six months old to at least 50 percent, as part of her objectives for the year 2000 (Select Committee on Hunger House of Representatives, 1992).

However, research has indicated that many immigrant women who had exclusively breastfed their first children in their home countries failed to breastfeed their second children born in this country (Ghaemi-Ahmadi, 1992). Riordan (1983) reported that

almost all Japanese women traditionally breastfed their infants for at least two years until the end of World War II, while now they tend to wean by one year because of Western influences.

Dr. Itsuro Yamanouchi, Chairman of the Committee on New-Born Infants of the Japanese Pediatric Society and President Emeritus of the Okayama National Hospital, advocated natural weaning and stated that even Dr. Tomisaku Kawasaki, Chairman of the Department of Pediatrics in the Nisseki Medical Center and a famous discoverer of the Kawasaki disease, had been breastfed until he was in elementary school (Yamanouchi, 1989). Also, research showed that parents in the culture where breastfeeding and co-sleeping are the norm, may regard co-sleeping as important for interdependence and intimacy while the avoidance of co-sleeping by mainstream US families is connected with American stress on independence and self-reliance. For example, Mayan parents regarded the US practice of having infants and toddlers sleep in separate rooms as "merciless" and "tantamount to child neglect" (Morelli, Rogoff, Oppenheim, and Goldsmith, 1992, p. 608). On the other hand, in the US, according to Sugarman (1989), child protective agencies might label older toddler nursing and co-family sleeping as child abuse due to cultural differences regarding parenting behavior.

This research will be important from a cross-cultural viewpoint, because ethnic minority people have more difficulties in

continuing breastfeeding in the US than in their home countries in spite of the advantages of breastfeeding (Meftuh, Tapsoba, & Lamounier, 1991; Romero-Gwynn, 1989). There are some studies on breastfeeding among the immigrant populations who use the Special Supplemental Food Program for Women, Infants and Children (WIC) (Armotrading, Probart & Jackson, 1992; Ghaemi-Ahmadi, 1992). Romero-Gwynn (1989) conducted research on Indochinese immigrants in Northern California and Meftuh et al. (1991) conducted research on breastfeeding practices of Ethiopians in Southern California. But the immigrants in these studies tended to be poor and stigmatized. This study will investigate the thoughts and feelings of an affluent, non-stigmatized ethnic minority. This research will also be important because recent Japanese immigrants, who seldom speak English very well, have rarely revealed their thoughts to researchers.

This study will be helpful for social work professionals because they know very little about the behavior and thoughts of the Japanese breastfeeding population. Some professionals see toddler nursing and co-sleeping as pathological. Furthermore, the information will be helpful in individual therapy for cultural conflicts about child rearing practice as well as family therapy for intergenerational conflicts.

Definition of Terminology

The major terms used in this study are defined as follows:

1. Scheduled nursing: breastfeeding babies in a fixed schedule, such as nursing every three or four hours.

2. Unrestricted breastfeeding or unrestricted nursing: breastfeeding babies on demand during the day time as well as night time.

3. Formula: breast milk substitute that is commercially produced. Formula feeding is also called bottle feeding.

4. Co-sleeping: a sleeping arrangement in which the baby or toddler sleeps in the same bed as the mothers.

5. A nursing toddler: a toddler who continues to be breastfed in addition to being given solid food.

6. Weaning: to stop breastfeeding. Although weaning might suggest introduction of solid food in some literatures (Hervada & Newman, 1992; Underwood, 1985), it refers to the time when a baby totally stops sucking her/his mother's breasts. Weaning may be led by either babies or mothers. Natural weaning means that a baby stops sucking her/his mother's breasts by her/himself without being forced to stop by her/his mother.

7. Duration of breastfeeding: the time span from birth until weaning. Long term breastfeeding refers to breastfeeding over one year.

8. La Leche League: the name of a mutual support group for breastfeeding mothers. "La Leche" means milk in Spanish.

CHAPTER 2

LITERATURE REVIEW

In this chapter, the researcher will review the benefits of breastfeeding, compare current breastfeeding practices and history in Japan with those in the US, refer to some health issues as well as political issues, and then discuss breastfeeding issues in social work.

Infant Mortality and the World Trend of Breastfeeding

In Japan, the Okayama National Hospital's nursery for premature babies, which was established in 1953 and treats 260 low birth weight infants annually, has been contributing to efforts to reduce infant mortality. Low birth weight is said to be the greatest contributing factor to infant mortality. In 1973, under the direction of Dr. Itsuro Yamanouchi, this nursery at the Okayama National Hospital changed it's policy from formula to donor breast milk feeding. More recently, Dr. Yamanouchi further changed the policy and required that breast milk come from the infant's mother. Now Japan has the lowest infant mortality rate in the world, and Okayama has the lowest infant mortality in Japan (Long, 1988).

The infant mortality rate in Japan is the lowest in the world, 5 infant deaths per 1,000 live births. The second lowest country is

Sweden, 5.7 per 1,000. The United States is far behind, 10.1 per 1,000 live births. The cesarean rate is also low, 7 cesareans per 100 hospital births, while the United States has 23 cesareans per 100 hospital births (Korte, 1992).

According to James P. Grant, Executive Director of UNICEF:

> Breastfeeding is a natural "safety net" against the worst effects of poverty. If the child survives the first month of life (the most dangerous period of childhood) then for the next four months or so, exclusive breastfeeding goes a long way toward canceling out the health difference between being born into poverty and being born into affluence . . . it [sic] is almost as if breastfeeding takes the infant out of poverty for those first few months in order to give the child a fairer start in life and compensate for the injustice of the world into which it was born. (La Leche League International, n. d.)

Grant, Executive Director of UNICEF said that some 3,000 to 4,000 thousand infants died every day from not being breastfed (Select Committee on Hunger House of Representative, 1992).

In 1981 at the 34th World Assembly of the WHO, in order to promote and protect breastfeeding, the WHO International Code for controlling the marketing and promotion of breastmilk substitute (infant formula) was adopted with 118 countries voting in favor and only the United States voting against (Brown, 1988). Japan abstained from voting along with Korea and Argentina (Nyuji-you-kona-milk-mondai-wo-kangaeru-kai, 1988; Miyoshi, 1983). The WHO Code includes the following ten main provisions (Palmer, 1988, pp. 223-224);

1. No advertising of breastmilk substitutes.

2. No free samples to mothers.

3. No promotion of products through health care facilities.

4. No company mothercraft nurses to advise mothers.

5. No gifts or personal samples to health workers.

6. No words or pictures idealizing artificial feeding, including pictures of infants, on the labels of the products.

7. Information to health workers should be scientific and factual.

8. All information on artificial feeding, including the labels, should explain the benefits of breastfeeding and the costs and hazards associated with artificial feeding.

9. Unsuitable products, such as sweetened condensed milk, should not be promoted for babies.

10. All products should be of a high quality and take account of the climatic and storage conditions of the country where they are used.

In 1989 more than 80 countries, but not the United States and Japan, ratified the United Nation's General Assembly Convention on the Right of the Child (CRC), which for the first time established rights for children. These rights included the right to health care, education, and prenatal care for their mothers. Article 24 of the Convention established the right to be informed of the advantages of breastfeeding (Marmet, 1993; Yamonouchi, 1991).

In 1990 policy makers from 30 countries, including the US, met in Florence, Italy at the Innocenti Center to discuss a global breastfeeding policy. They produced the Innocenti Declaration, which sets international standards for breastfeeding promotion, recommending that all governments establish conditions necessary to achieve the standards. According to the Innocenti Declaration, optimal breastfeeding means that

> all women should be enabled to practise exclusive breastfeeding and all infants should be fed exclusively on breastmilk from birth to four to six months of age. Thereafter, children should continue to be breastfed, while receiving appropriate and adequate complementary foods, up to two years of age or beyond. (Cited in World Alliance for Breastfeeding Action [WABA], 1993)

Also in 1990, for the first time in history, 70 heads of national governments met at the World Summit for Children. The Plan of Action under nutritional goals embraced the promotion of breastfeeding and includes directives to empower women to breastfeed (Marmet, 1993).

In 1991, a joint WHO/UNICEF Baby Friendly Hospital Initiative (BFHI) was launched in Turkey at the International Pediatric Association meeting. The initiative enabled hospitals worldwide to evaluate their support of breastfeeding by assessing their compliance with "Ten Steps to Successful Breastfeeding." Another purpose of the BFHI is to stop free supplies of breast milk substitutes to maternity services (Marmet, 1993).

To become baby friendly, hospitals must practice each of the following activities (Select Committee on Hunger House of Representatives, 1992, p. 178):

1. Have a written breastfeeding policy.
2. Train all health staff to implement this policy.
3. Inform all pregnant women about the benefits of breastfeeding.
4. Help mothers initiate breastfeeding within half an hour of birth.
5. Show mothers the best way to breastfeed.
6. Give newborn infants no food or drink other than breast milk, unless medically indicated.
7. Practice "rooming in" by allowing mothers and babies to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats, pacifiers, dummies or soothers.
10. Help start breastfeeding support groups and refer mothers to them.

In 1991, UNICEF sponsored a meeting of representatives of non-governmental organizations (NGOs) to promote breastfeeding toward the goals of the Innocenti Declaration in 1990. World Alliance for Breastfeeding Action (WABA) was formed with 17 organizations, including La Leche League. WABA seeks to coordinate and help the exchange of information among organizations and

countries, mobilize support for breastfeeding programs, and monitor implementation of breastfeeding codes and other resolutions on hospital practices by governments, health professionals, and the commercial baby milk industry. The first International Breastfeeding Week, supported by WABA, commenced August 1, 1992, on the Anniversary of the Innocenti Declaration.

The Benefits of Breastfeeding

There is a convincing amount of scientific evidence of the morbidity and mortality advantages for breastfed over formula-fed infants.

About half of the newborn's immunities come from the colostrum, the yellow or gold first milk the baby receives in his/her first few days of life, which protects newborns from infections. Colostrum also has a laxative effect to help baby pass meconium, baby's dark tarry first bowel movement, which makes the baby hungry and stimulates the mother's milk supply; it also decreases absorption of bilirubin, which is potentially toxic and can cause cell damage, lowering the likelihood of jaundice. Breast milk supplies all necessary nutrients in the proper proportion and is digested easily. It provides antibodies to any illnesses to which the mother has been exposed; protects against infection, including ear infection; prolongs the period of natural immunities to mumps, measles, polio, and other diseases; decreases the predisposition to future diseases; helps keep the baby well-hydrated and speeds

recovery during illness; reduces the risk of allergies; reduces the chance of obesity later in life; enhances the baby's hand-eye coordination by being switched from one breast to another as he/she nurses; and promotes proper jaw, teeth, and speech development (Mohrbacher & Torgus, 1989).

The immunological benefits of breastfeeding toddlers have been documented. Such data support the finding that even partial breastfeeding during the second year provides certain protective immunological factors (Brown, 1988).

According to J. P. Grant, Executive Director of UNICEF, the benefits of breastfeeding are not only for developing countries. A recent article in the British medical journal, Lancet, shows a significantly higher I.Q. among premature infants who are fed breast milk, as compared to premature infants who are fed formula (Select Committee on Hunger, 1992). Newton (1971) also indicated a high IQ among breastfed children. She attributed one reason to biochemical factors and another reason to social learning. Palmer (1988) stated that the use of a high-protein formula and a chloride deficient formula might be linked to later learning disorders.

Physiological benefits to mothers include: reduced risk of hemorrhaging after birth due to a release of hormones which contract the uterus and speed the mothers' healing from birth, natural weight loss by using an extra 500 calories a day, reduced risk of premenopausal breast cancer and uterine cancer, delayed

return of menstruation, and better spacing of births (Mohrbacher & Torgus, 1989; Select Committee on Hunger, 1992). Psychologically, breastfeeding reduces the baby's frustration by satisfying hunger immediately and brings the mother and baby close, building a strong bond of love (Mohrbacher & Torgus, 1989).

Many people believe that a bottle-fed baby is receiving an experience emotionally and behaviorally equivalent to that of a breastfed baby if she/he is being held in the mother's arms (Newton, 1971). However, Newton (1971) denied the belief. In order to clarify the differences, she classified two patterns of breastfeeding practices: unrestricted breastfeeding and token breastfeeding.

According to Newton (1971), unrestricted breastfeeding has been practiced by most preliterate, or non-industrial cultures. The infant is fed whenever s/he cries or fusses. S/he usually shares the mother's bed or at least shares the room with the mother so that s/he can easily access the mother's breast during the night. Weaning comes late. On the other hand, token breastfeeding is characterized by limited sucking and total weaning usually occurs within a few weeks. Infants and mothers are likely to sleep in different rooms.

> The strength of the infant's breast sucking is limited by teaching it bottle sucking techniques, by dulling the appetite with glucose, water, formula and semisolid food. . . . Token breastfeeding is the most common pattern of breastfeeding in

> some fully industrialized countries, and is closely related to total artificial feeding. (p. 994)

Newton (1971) discussed the psychological differences between breast and artificially fed infants in relation to the initial experience, assuagement of hunger, mother-baby interaction, oral gratification and anal sensation, learning and activity, and personality and adjustment. She said that unrestricted breastfeeding could foster a strong individualized attachment because nourishment and comfort sucking were not split the way they are in token breastfeeding and bottle feeding. The bottle fed infant might be held while feeding but not while sucking his thumb or pacifiers. In addition, holding the infant during feeding becomes even less likely when the infant gets older and can hold his/her own bottle. Newton (1971) stated that not only is oral gratification different, but anal sensation is also different in breastfed babies because breast milk stools are always soft.

According to Kenkel (1973), unrestricted breastfeeding is desirable psychoanalytically. The baby is more likely to find optimum gratification for the oral-dependency needs of infancy (1973). Psychoanalyst Spitz (1965) said that the stimulations from multiple sensory organs were totally mediated through breastfeeding. A nursing baby looks not at the breast, but at the mother's face, and he succeeds in segregating a meaningful entity, the mother's face, within the chaos of meaningless environmental things. Spitz was afraid that bottle-fed babies might be deprived of

the mother's face as a visual factor if he/she was not held during feeding. He also thought, "the rubber nipple does not convey the exquisitely human reciprocity response" (p. 82).

Newton (1971) said that the mother practicing unrestricted breastfeeding is psychophysiologically in a unique situation. She receives the pleasurable sensations of sucking and may be subjected to the effects of repeated high levels of prolactin and oxytocin. Research with animals suggests that lactating females showed a suppression of adrenocortical activity in response to trauma or pain.

Nature intends for mothers to enjoy breastfeeding their babies. When babies suck the nipples, two powerful hormones, prolactin and oxytocin, are released. Prolactin, the hormone which produces milk, is a natural tranquillizer and makes nursing more pleasurable for mothers. Oxytocin, the hormone which causes the let-down reflex and ejects milk, is also said to trigger nurturing behavior (La Leche League International, 1991).

Recent research has pointed out the clear relationship between breastfeeding behavior and the return of fertility. Frequent and effective sucking of the baby is responsible for the suppression of the ovarian cycle. Mothers who breastfeed their babies unrestrictedly (for comfort as well as for feeding, night as well as day) generally have no menstrual periods for many months. A woman can ovulate and become pregnant before having a period. That's why many health professionals explain that breastfeeding is

not a method of birth control. However, the likelihood of ovulation is small during the baby's first six months if he/she is breastfed often and without restriction (Mohrbacher & Stock, 1991).

Current Breastfeeding Practices

Japan

The Japanese government has been giving each pregnant woman a copy of Boshi Kenko Techo, translated as the Maternal and Child Health Handbook (MCH). Based on the German Mutter Kind Pass, the MCH is designed to hold a detailed medical account of the woman's pregnancy, the birth, and the growth of her child until the age of six (Korte, 1992). Along with the MCH, each pregnant mother receives a small text named Baby: For its happiness. A proponent of this text, Jushichiro Naito, MD, is an advocate of breastfeeding. The text explains the importance of breastfeeding especially in the early months, while it also contains advertisements for infant formula (Kobayashi, Takahashi, Hirayama et al., 1989 and 1992).

The statistics of the Department of Public Welfare in Japan revealed that in 1986 an average of 49.5% of the babies were breastfed at one month and 39.6% of the babies at three months in 1986 (Nyuji-you-kona-milk-mondai-wo-kangaeru-kai, 1988). According to Korte (1992), over 90 percent of the new mothers initiated breastfeeding, and more than 50 percent of them breastfed exclusively. In one survey in 1982, of 100 homemakers, 99

pregnant women wanted to breastfeed; 50% breastfed exclusively upon discharge from the hospital, and about 30% breastfed exclusively at 3 months (Eguchi, 1991).

In the Okayama National Hospital, which was designated in 1991 as the first Baby-Friendly Hospital in the world, in 1973 100% of the babies are breastfed upon discharge from the hospital; 55.2% were exclusively breastfed at 3 months (Yamanouchi, 1993).

The United States

The American Academy of Pediatrics recommended that infants be fed breast milk for the first six to twelve months in its Statement in 1992 (La Leche League International, 1992a).

In the revised 1988 data, 52% of American mothers in the general population were breastfeeding at hospital discharge, and 16% were breastfeeding at 6 months. About 39% of the mothers in low-income households were breastfeeding at hospital discharge, and 10% were breastfeeding at 6 months. About 36% of WIC participants were breastfeeding at hospital discharge, and 9% were breastfeeding at 6 months (Select Committee on Hunger House of Representatives, 1992). However, one study on Persian and Southeast Asian immigrants reported that 95% of the mothers had exclusively breastfed their first children, but after immigration to the US, only 32% exclusively breastfed their second children born in this country (Ghaemi-Ahmadi, 1992). Another study on Indo-chinese immigrants in Northern California revealed that while 97%

of the mothers breastfed their last infant born in Indochina, only 26.1% and 22.4%, respectively, breastfed their first and last infants born in the US (Romero-Gwynn, 1989).

The current target for the US population, as stated by the Surgeon General as part of the objectives for the year 2000, is to increase the population of mothers who breastfeed their babies in the early postpartum period to at least 75% and to increase the proportion who continue breastfeeding until their babies are five to six months old to at least 50% (Select Committee on Hunger House of Representatives, 1992).

More recently, in the US, "The Breastfeeding Promotion Act of 1992" (H. R. 4322) was introduced in the House of Representatives in the Senate as S.2374. The Act authorized the Secretary of Agriculture to establish a breastfeeding program to promote breastfeeding as the best method of infant nutrition and foster wider public acceptance of breastfeeding in the US. The Breastfeeding Promotion Consortium is composed of 22 health professional, governmental, advocacy and public health organizations covered by the US Department of Agriculture at the suggestion of the American Academy of Pediatrics. The Healthy Mothers, Healthy Babies Coalition, a broad-based coalition of public and private agencies and organizations with an interest in maternal child health will have the primary role as coordinator of the BFHI initiative in the US.

The Proposed Rule to Enhance the Special Supplemental Food Program for Women, Infants and Children (WIC) Food Package for Exclusively Breastfeeding Women was published in the March 19, 1992, Federal Register. The proposed rule would enable breastfeeding mothers whose infants do not receive infant formula from the WIC program to get a separate enhanced WIC food package called Food Package VII (Select Committee on Hunger House of Representatives, 1992).

The History of Breastfeeding

Japan

Riordan (1983) reported that prior to World War II, almost all Japanese mothers traditionally breastfed their infants for more than two years, while now they tend to wean by one year because "the Western linear model of preoccupation with measurement and control was reflected" (p. 299). Until early in this century, mothers in China and Japan still nursed their children for four or five years (Mohrbacher & Stock, 1991). A study of the rural areas of Japan in 1943 showed that babies were weaned at an average of about two years and some babies continued to nurse until 3 to 9 years (Aiiku Institute, 1943).

Sawada (1983) said that one of the reasons Japanese have been breastfeeding unrestrictedly and weaning naturally is their unique open living system which is shared by multi-generational family members. According to Sawada (1983), this practice is more

difficult in Western individualistic society where each individual is supposed to have privacy in his/her own room.

Sawada (1983) stated that recent guidelines of breastfeeding by Japanese pediatricians has been a compromise between unrestricted nursing and scheduled nursing since scheduled nursing was introduced by Western medicine. Sawada says that the Western form of scheduled nursing has never been popular in Japan and recently traditional Japanese unrestricted nursing has begun to be emphasized again. A zoologist who stayed in Japan in the Meiji 10's era (1877-1886) wrote in a book about Japan, "I have seldom seen fussy babies and never seen hysterical mothers. I am sure that no other countries have more devoted mothers and happier babies than Japan" (cited in Matsuda, 1977, p. 62). He was also surprised to see that Japanese mothers nursed in public. Matsuda (1977) explained that Japanese babies were quiet because mothers nursed on demand no matter where or when. Matsuda said that the idea of scheduled nursing every three or four hours comes from Germany and ascribed to German militarism which required punctuality. Another possible source is Frederick Truby King (1858-1938) who went to Japan in 1940, and later became Director of Child Welfare in New Zealand. He was impressed by the popularity of breastfeeding in Japan and by the good physique of the general population. He began to encourage breastfeeding in New Zealand. However, he was preoccupied with a fear of overfeeding in breastfed

infants and his emphasis on the danger of overfeeding led many Western societies to believe in scheduled nursing (Wickes, 1953).

In the Meiji Era (1868-1912), Japanese medicine was influenced by Germany to use cow's milk as a supplement (Tasaka, 1983). In 1870, the Cow-horse Company began to sell cow's milk named "no more wet-nurse" (Miyake, 1985). According to Matsuda, the first bottle with a rubber nipple, also named "no more wet-nurse," was sold in 1871. At the end of the Meiji Era (1912), 70% of the babies were breastfed, sometimes by wet-nurses; 14% were bottle-fed, and the rest were partly breastfed (Matsuda, 1977).

Matsuda (1977) said that the first Western pediatrician in Japan, Kouda, MD, who learned pediatrics in Germany and published Pediatrics manual in 1988, seems to have felt the conflict between Western science and Japanese customs. Dr. Kouda introduced German scheduled nursing eliminated night nursing. However, he added that these practices were related to their culture and might be difficult for Japanese because Japanese were accustomed to nursing whenever infants cried. Matsuda said that in the West where parents sleep in a different room from the children, the parents' interest is to let infants sleep in a different room as early as possible and eliminate night nursing because of Western couples' customs, not the infants' nature (1977).

According to Yokoyama (1987), the Japanese changed to the Western model of "scientific child rearing" after they lost World War

II (WWII). Many scientists and scholars denied traditional "superstitions." After WWII, during the occupation period, people began to learn American early weaning (by 1 year old) which teaches that late weaning prevents children's independence. In 1951, a child rearing guide book published by the US Government was translated into Japanese. Some books in this era advised mothers not to listen to the experiences of Japanese relatives but to read a scientific book and to consult professionals.

Eguchi (1991) stated that hospital births, the spread of Western medical child guidance, and the advertising efforts of formula companies since the 1950s accelerated the destruction of the Japanese tradition of home birth and breastfeeding. It is said that bottle feeding was at the height of its popularity during the 1960s and 1970s. Many mothers lost self-confidence in breast-feeding and used formula. As a consequence, they cannot pass on the traditional Japanese arts of breastfeeding and child rearing now.

The advertisement of the Meiji formula in the text of the Maternal and Child Health Handbook in 1969 said that its evaporated milk raised more than 5,000,000 babies in Japan since 1951, and formula-fed babies won first prize in a baby contest 3 years in a row. Matsuda criticized the baby contest, judged by the weight and length of the babies, because bigger babies are not necessarily healthier (1977). Yokoyama (1987) said that the advertisement for infants formula often mentioned the prizes in the

baby contest because the formula-fed babies had more weight and length and thus won the first prizes.

In 1966, Dr. Spock's Baby and child care was translated into Japanese and reinforced Western medical perspectives. Although Dr. Spock changed his attitude some in his second edition (for example, his attitude toward late weaning became mild later), many Japanese health professionals might have been influenced by his former strict attitude.

However, during the 1970s some leading pediatricians, such as Michio Matsuda, MD, Tatsuo Matsumura, MD, and Itsuro Yamanouchi, MD tried to promote breastfeeding through the mass media. Despite their efforts, many hospitals recommended only "token" breastfeeding. Those who made up the generation gap were nurse-midwives who massaged breasts painlessly and taught how to breastfeed (Eguchi, 1991). Riordan (1983) stated that Japanese use of breast massage is a cultural ritual and its effectiveness for lactation is undetermined.

One more strong influence on Japanese mothers is the text of the Boshi Kenko Techo (the Maternal and Child Health Handbook), which every pregnant mother receives from a municipal office Jushichiro Naito, a proponent of the text, is a Chairman of the Japanese Pediatric Academy and President Emeritus of the Aiiku Hospital. He had noticed that infants who were not totally breastfed from birth, developed a milk allergy. Although he advocated

breastfeeding, he thought breast milk is only nutritionally valuable. He advised mothers to breastfeed for three months unrestrictedly but recommends scheduled nursing after three months. He strongly believed that late weaning was not good and suggested weaning around one year (Naito, 1990). The researcher thinks that this is the reason public health stations usually guide mothers to wean infants around one year.

Recent events both promote and detract from breastfeeding.

In the 1980s, mother-to-mother support groups such as the La Leche League group for Japanese by Japanese in Tokyo, and the Bonyu-ikuji Circle in the Kansai area, were established (Eguchi, 1991). In 1981, Japan, Korea, and Argentina abstained from voting on the WHO Code (Miyoshi, 1983; Nuji-you-kona-milk-mondai-wo-kangaeru-kai, 1988). Advertisement by Japanese formula companies continued in Japan as well as in developing countries. In 1993, the researcher found that Nestle began to sell formula in Japan and saw their advertisement in a popular monthly magazine for pregnant and new parents (P.and, 1993). In 1992, the first Conference by leading pediatricians and obstetricians to promote breastfeeding on the first World Breastfeeding Week was held (Yamanouchi, 1993).

The United States

In the United States, no acceptable alternatives to breast-feeding existed until the twentieth century. If the infant was not

breastfed by his/her mother or a wet-nurse, he/she generally did not survive (Brown, 1988). Caulfield and Hartford (1952) stated that "Negro slaves" in Virginia in the middle of the 18th century were given nursing time (45 minutes at each feeding) and allowed to nurse their children for 12 months. Nursing time during work was given 3 times a day until children were 8 months old and then twice a day until 12 months old. New England children were usually nursed much longer. There were no rigid rules for determining when to wean, but the average age appeared to have been about 17 months or when the next baby was ready to be born. Some record showed that some children nursed until the third or even ninth year.

> [I]n court cases involving foundling, orphans, or illegitimate infants, wet nurses were supplied by the county, town, or parish. . . . In many Virginia parishes the annual fee allowed wet nurses for illegitimate children was 800 pounds of tobacco. (Caulfield & Hartford, 1952, pp. 677-678)

During the industrial revolution, because of widespread outside employment of women in industry, breastfeeding and rearing of young children became more difficult for working mothers (Jelliffe & Jelliffe, 1978). Systematic evaluations of the milks of various animals, as well as of cereals and paps (breast milk substitute made from bread and water), were conducted. In 1885, an analysis of human milk showed the low concentration of protein in human milk compared with other milks. The study led to attempts to feed diluted milks of other animals. However, diluted

milk did not support adequate growth. As a result, sugar or cereals were added to diluted milk. Nonetheless, mortality remained high among artificially fed infants.

During the first half of the 20th century, a number of factors contributed to the decline in the incidence of breastfeeding in the US, including:

1. scientific dairy farming,
2. safe water supply and improved sewerage systems,
3. public education, hygiene, and sanitation,
4. availability of refrigeration,
5. stabilization for storage of cow's milk through evaporation, canning, and pasteurization,
6. mass production technology for infant-feeding bottles and nipples, and
7. the routine separation of mother and infant following hospital deliveries. (Brown, 1988, p. 113)

The decline of breastfeeding first began with the upper socioeconomic classes, gradually spreading to the middle and lower socioeconomic classes (Brown, 1988). In 1911, 58% of American infants were still breastfed at 1 year of age (Neville & Neifert, 1983). From 1930 to 1945, women of lower socioeconomic classes still tended to breastfeed, although use of bottles of homogenized evaporated milk was gradually becoming popular. A national study in 1946 estimated that about 65% of infants were either fully or partially breastfed (38% of infants were solely breastfed) at the time

of hospital discharge. However, this figure had fallen to 27% (18%, solely breastfed) by 1966 and dropped to 18% by 1968 (Brown, 1988; Neville & Neifert, 1983).

Tanoue and Oda (1989) suggested that an increased prevalence of infantile autism all over the world is related to the decreased incidence of breastfeeding. They found that autistic children were more likely to be weaned within a week ($p < .005$) than in the controls. Tanoue and Oda (1989) thought that colostrum produced in early days could protect infants from various infections that might cause autism. They argued that autism developed more prevalently in the socioeconomic status (SES) where the incidence of breastfeeding was less frequent. For example, several decades ago a higher SES and less breastfeeding were reported for parents of autistic children. As the rate of breastfeeding increased among higher SES and decreased among lower SES, data showed that parents of autistic children came from any SES. Recently, a new correlation can be seen between lower SES, less breastfeeding and prevalence of autism.

As more studies on breast milk have been developed, more additional substances have been added to infant formulas. However, no substitute equal to breast milk has yet been found (Barness, 1987).

According to Spitz (1965), during WWI and around 1940, infants were nursed on a rigid schedule. The mothers were taught

not to spoil their children. In 1942 the radical revision of the new edition of Infant Care of the United Stated Children's Bureau advised against a rigid schedule of nursing (Spitz, 1965).

In the mid 1940s, Dr. Benjamin Spock presented twice as many pages in his description of breastfeeding as compared with his topic of bottle-feeding in his Baby and child care, the book which is the second best-selling book in American history preceded only by the Holy Bible (Brown, 1988). Clifford G. Grulee, MD, Chief editor of American Journal of Diseases of Children and Founder of the American Academy of Pediatrics, also advocated breastfeeding (Richardson, 1953).

In the 1960s, the incidence of breastfeeding began to increase, especially among the higher SES. The causes of the trend back to breastfeeding include the establishment of La Leche League, a "back to nature" incentive described as a return to naturalism, and increased breastfeeding promotion by health professionals (Brown, 1988). In 1976, 38% of infants were breastfed, compared with 18% in 1966; the number had more than doubled in 10 years. In 1978, over 50% of newborn were breastfed (Jelliffe, 1979). Many studies in the 1970s clearly indicated that women who chose to breastfeed in the US were more likely to be white, be older, had higher levels of formal education, and had a higher average income (Brown, 1988). In 1978, the Committee on Nutrition of the American Academy of Pediatrics acknowledged the need to promote

breastfeeding promotion. In 1981 the WHO Code was adopted with 118 countries voting in favor and only the United States voting against such a Code.

A group of California Lawyers known as the Public Advocates, Incorporated addressed the problem by directing a petition to the United States Food and Drug Administration and to the Department of Health and Human Services titled "Petition to Alleviate Domestic Formula Misuse and Provide Informed Infant Feeding Choice."

> This petition emphasized the promotion of formula inappropriately to low-income families where the associated lack of education prohibited an informed choice and which caused harm to a disadvantaged sector of the population. (Brown, 1988, p. 122)

About the same time, the United States Department of Agriculture (USDA) authorized and developed the Special Supplemental Food Program for Women, Infants, and Children (WIC) to provide low-income participants with food and formula.

Although one main target population is breastfeeding women, WIC annually spends only $8 million on breastfeeding support and promotion and some $400 to $500 million on infant formula. (Committee on the Judiciary; Subcommittee on Antitrust, Monopolies, and Business Right, 1991). According to deMauro (1991), formula sales amounted to $1.7 billion a year, and the WIC accounted for more than 40% of the American market. According to the USDA, an estimated $29 million or more could be saved

annually in formula costs if WIC mothers would breastfeed for just one month (La Leche League International, n. d.)

One study showed that among well-educated participants in WIC (female international students and international women married to international students at a large Florida university), some women who used infant formula either partially or fully, indicated the availability of formula from WIC influenced their decision to bottle-feed (Armotrading, Probart and Jackson, 1992). While in some areas WIC nutritionists are pro-breastfeeding, in other areas, WIC could be "a formula outlet, with the US Government being the largest purchaser of formulas in the world" (Brown, 1988, p. 123).

The rate of breastfeeding at hospital discharge in 1984 was 59.7%. It declined to 52.2% in 1989. The rate of breastfeeding at 6 months of age also declined from 23.8% in 1984 to 18.1% in 1989. Those with the least education, lowest income, and minority status have most participated in the decline. Another factor may be the recent initiation of public advertising of infant formula through the media (Ryan, Rush, Krieger, & Lewandowski, 1991).

In 1987 La Leche League International (LLLI) began a Peer Counsellor training program to reach minority low income mothers (Mohrbacher & Torgus, 1989). An International Board Certification was established, and through examinations screened by an International Board of Lactation Consultant Examiners, Lactation Consultants are certified under the US National Commission for

Health Certifying of Allied Health Professionals, which is also responsible for the certification of physical therapists, speech therapists, etc. (Jelliffe, Jelliffe, Latham & Greiner, 1988). These qualified lactation professionals are working to help breastfeeding mothers who need specific care, as well as to educate hospital and medical health care providers in the US.

The 1990s saw the BFHI setting breastfeeding standards promoted by WHO and UNICEF. On a hospital by hospital basis this opens the door to education on breastfeeding. However, by 1993 there was still no officially approved Baby Friendly Hospital in the US, while there are already two in Japan.

Importance of Support and Development of La Leche League

Kearney (1988) said that beliefs and attitudes toward breastfeeding could have major impacts on breastfeeding success, and cultural differences affect the most important sources of support to new mothers. Among black Americans, support from a close friend was most important; among Mexican-Americans, support from the mother's mother was most important, and among white-Americans, the male partner was the key source of support (Kearney, 1988). However, as Silverman (1980) says, "many people have discovered that they can receive more help and enlistment from strangers who have the same problem than they can from those closer to them" (p. 9). Kaufman and Hall (1989) said that the

number of supports reported by mothers was the most influential factor on duration of breastfeeding.

During the normal life cycle, an individual has to go through transitions from one role to another. Mutual-help groups can help to cope with the transition successfully (Silverman & Murrow, 1976). La Leche League (LLL) is "not a pressure group" (Turner, 1987), but "more than just breastfeeding support" (Shea, 1992). LLL helps breastfeeding mothers deal with their life transition to parenthood.

One study (Shand & Kosawa, 1984) showed that the sample of Japanese mothers had no private consultation with a professional, including physician, nurse, or LLL member, while one-fourth of the American mothers consulted a professional in private about breastfeeding. While Shand and Kosawa (1984) counted a LLL member as a professional, an LLL member is literally not a professional but a breastfeeding mother in a mutual help group.

According to Silverman (1980), mutual help is often very effective because:

> 1. participants find other people "just like me";
>
> 2. they learn that other people have similar feelings and that those feelings can be "normal" in their circumstances; and
>
> 3. they are encouraged by the observation that they too, in turn, can become helpers rather than clients. (1980, pp. 10-11)

Powell (1987) listed LLL on lifestyle organizations, including the National organization for Women (NOW), the National Gay and Lesbian Task Force and Federation of Parents and Friends of Lesbians and Gays (Parents/FLAG).

In 1956, Marian Tompson in Illinois, a founder and a President of La Leche League International (LLLI), who was not able to nurse her three babies, did nurse her fourth baby with the support and encouragement of one doctor, a husband of her friend Mary White. Mrs. Tompson noticed that her personal difficulties with breastfeeding were a social problem, which was common to other mothers (La Leche League International, 1977). Marian and Mary along with five other mothers founded a support group. In 1957, they named the group La Leche League. "The name La Leche is Spanish for milk, for this organization was founded in 1956 at a time when breast feeding was not only unfashionable but also not a suitable title for a voluntary group" (Turner, 1987, p. 363). In the early 1960s, an article about La Leche League in the Reader's Digest gave the League its first international publicity, and after the mid-sixties more and more published information became available about breastfeeding (La Leche League International, 1977). Now La Leche League is active in 46 countries. LLL meetings facilitated by accredited Leaders are informal discussion groups. Information is presented following a planned schedule of topics that cover the

practical, physical, and psychological aspects of breastfeeding (La Leche League International, 1987).

LLL's Breastfeeding Peer Counselor Program was started in 1987. It is designed to reach more mothers who need breastfeeding information and support, especially mothers in low income minority communities. Peer counselors chosen from a community are given 20 hours of training in breastfeeding knowledge and helping techniques. After completion of the training, they receive a certificate from LLLI qualifying them to counsel mothers, although they do not represent LLL in the same way an accredited LLL Leader does (Wiggins, 1992).

Although LLL Japan started in 1991, many Japanese mothers do not seem aware of their existence.

Controversies

Weaning

In his first edition of Baby and child care, Spock said it is preferable to have a baby weaned from the breast by six or seven months if he seems ready for it, and when the baby nurses longer, "it may become a habit that makes him unnaturally dependent on his mother" (1957, p. 98). However, in contrast, in his new edition, Spock said,

> But there are many breastfeeding mothers who definitely want to go to at least a year of age or to 2 years. They cite the frequency, in natural, simple societies, of breastfeeding until 2 years of age or longer. (It's my understanding that the

> commonest motive for this is birth control.) Anyway, I see no reason for not nursing until the age of 2 years if mother and baby want to. (1976, p. 126)

He also introduced LLL in his section on breastfeeding (1976). It is interesting that the main reason for the new revision is "to eliminate the sexist biases of the sort that help to create and perpetuate discrimination against girls and women" (p. xix). He seems to try to understand a mother's point of view, although his understanding of the mother's motive for extended breastfeeding is limited to birth control.

The Oketani method in Japan recommended nursing at least until the baby begins to walk (Oketani, 1985). Oketani believed that abrupt weaning is good if both mother and baby have good health and that gradual weaning creates bad milk to the baby and causes troubles in the mother's milk ducts (Matsumura & Takeuchi, 1981). At the same time, Oketani advised not to neglect the care of breasts after weaning, but get professional massages because plugged ducts after weaning may cause physical problems in mothers (Oketani, 1985). Yamanishi, a midwife of the Oketani method, said that the weaning day can be between 14 to 15 months and 2 years, but handicapped children, such as a child who has a severe allergy, Down's syndrome, or developmental disorders, had better nurse until 2 to 3 years. On the day of weaning, mothers are advised to draw "pretty" face pictures on the breasts. Yamanishi said that this

"natural and gentle" method was practiced by mothers in rural Gumma for a long time in the Meiji Era (Yamanishi, 1987).

Experts differed about the time of weaning. Jushichiro Naito, MD, President of Japanese Pediatric Academy and President Emeritus of the Aiiku Hospital, advised against late weaning. He suggested that mothers wean around 1 year. It is interesting that his belief comes not from his personal experiences, but from professional education and practices in Western medicine. He confesses he was artificially fed and had a milk allergy, although there were few artificially fed babies in his generation. His reason to recommend abrupt weaning is that older nursing babies will be dependent and spoiled and eat less, sleep less, and cry at night (Naito, 1990). On the other hand, Dr. Itsuro Yamanouchi, Chairman of the committee on New-Born Infants of the Japan Pediatric Society and President Emeritus of the Okayama National Hospital, advocated natural weaning and stated that even Dr. Tomisaku Kawasaki, Chairman of the Department of Pediatrics in the Nisseki Medical Center and a famous discoverer of the Kawasaki disease, had been breastfed until he was in elementary school (Yamanouchi, 1989). Newton (1977) said that the experience of sudden early weaning of token breastfeeding due to culture pressure might influence later personality and adjustment of the child.

The text of the Maternal and Child Health Handbook distributed in Japan changed. In 1969, the text said that mothers

should wean abruptly at 1 year because late weaning is harmful to both mothers and babies. In 1989, the text said that mothers had better wean in case nursing babies over 1 year eat little or do not drink cow's milk. In 1992, it said that mothers do not need to wean at a certain time because weaning time depends on individuals (Kobayashi et al., 1989, 1992; Naito & Kinoshita, 1969).

Food

Foods considered as increasing milk production vary. Traditionally, Japanese have used carp soup (koikoku), river fish, sea fish, sweet rice (mochi), rice wine (amazake), noodles (udon), lotus root (renkon), chickweed (hakobe), burdock root (gobou), as well as honeycomb of wasps (suzumebachi no su), and killifish (medaka) (Sawada, 1983). The Oketani method is skeptical to high calorie foods, such as carp soup (koikoku) and rice cakes (mochi). They recommend low calorie and low protein food and advise mothers to avoid meat, oil, and sugar because these food alter the quality and taste of the milk (Oketani, 1985).

Riordan (1983) said nutritional advice is mainly culturally determined. She warned that uniformed nutritional advice to lactating women, such as a well-balanced diet from the basic groups, might be harmful. Animal milk was frequently recommended in American society, but more than three out of four adult people in the world have lactose intolerance, "which causes belching, flatulence, cramps, and watery diarrhea from drinking milk"

(Riordan, 1983, p. 307). Palmer (1988) pointed out that the majority in the world lack lactase, the stomach enzyme necessary to digest milk. She stated, "Many Asians and Africans suffer from pain, wind and diarrhea if they are forced to drink milk" (Palmer, 1988, p. 18).

(There are some other controversies. See Appendix A: Alcohol, Cigarette and Breastfeeding, and Appendix B: HIV and Breastfeeding.)

The Common Difficulties and the Art of Breastfeeding

Many women discontinue breastfeeding due to problems. A sore nipple is a common problem, but an abnormality which is usually due to poor positioning of the baby on the breast. Many women reported sore breasts due to plugged ducts and breast infection. In either situation, breastfeeding can and should be continued. Sometimes mothers are told that they cannot breastfeed if they have inverted nipples. Inverted nipples go in when they are gently pinched. However, these mothers can, of course, breastfeed. Even with seriously inverted nipples, little plastic devices called breast shells can be helpful if they are worn in the bra during the last months of pregnancy or between feedings. It is better to avoid artificial nipples, including bottle nipples and pacifiers in early infancy. When given by bottle, supplements can cause nipple confusion, weakening the baby's suck or causing the baby to refuse the breast. Human milk provides all the nourishment a baby needs for

about the middle of her/his first year of life. No supplements, including water, are needed (The Florida Department of Health and Rehabilitative Services, 1991; Mohrbacher & Stock, 1991).

The Politics of Breastfeeding

Feminism and Breastfeeding

Jelliffe and Jelliffe (1978) pointed out the dual role of the female breast—sexual-aesthetic and nurturing—in Westernized communities, giving two examples. A woman was arrested for performing while she was breastfeeding her baby outside the John F. Kennedy Center, and a young married teacher at a college in Southern California was suspended by the authorities for discreetly breastfeeding her 4-month-old baby on campus. Helsing and King (1982) pointed out "the West's exaggerated concern with breasts as sexual objects" (p. 12). Some women feared that the shape of their breasts would be less atractive to their male partners if they breastfed (Helsing & King, 1982).

In the second half of twentieth century, the "women's liberation movement" raised a dilemma about infant feeding choice. On the one hand, liberated women should be free of sex-labelled roles, such as a breastfeeding mother. On the other hand, they need to feel the importance of being a woman (Brown, 1988). Brown said that the "back to nature" movement, along with the emphasis on women's liberation, promoted breastfeeding as the resolution of this dilemma (Brown, 1988, p. 116). Kearney (1988) said, based on a

1970s study, that the feminists' belief in personal control of life choices may be in conflict with the stance of a predominantly male medical profession that favors breastfeeding. However, the feminists who wrote the book, The new our bodies, ourselves: A book by and for women, in the 1980s say, "Most of us working on this book breastfed our babies because we wanted to and were proud . . . ." (The Boston Women's Health Book Collective, 1984, p. 399).

Helsing and King (1982) also explained why feminists recommend breastfeeding:

> Women's confidence in their ability to breastfeed is being undermined by many forces. . . . One rarely finds a woman who has the knowledge and courage to stubbornly and proudly protest: 'No, I do not believe that I can "lose" my milk. I believe it is of supreme quality, and I intend to feed it to my baby, as long as necessary.' To say this in a society where doubts about the quality and quantity of breastmilk are widespread, requires not only possession of the facts, but also an assertive attitude. And assertive attitudes are still not encouraged in women—Particularly about such incontrovertibly female matters as lactation. This may explain why the wave of feminist movements sweeping the world are [sic] so positive about breastfeeding. (1982, p. 11)

One argument in favor of bottle feeding points to the fact that the father can feed the baby. Advertisers often use this argument to sell their products. However, few fathers actually do take the whole responsibility of infant care, and most bottle feeding is still done by mothers (Palmer, 1988).

Opposition to Breastfeeding

The use of bottle-feeding with formulas based on cow's milk has become so prevalent that the majority of health professionals and nutritionists have been taught little about human milk and breastfeeding in their training (Jelliffe & Jelliffe, 1978).

There are some articles which questioned the superiority of breastfeeding. Thapa et al. (cited in Wray, 1991) stated that these were based on the Western mentality that "artificial milks are innocent until proven guilty, whereas breast milk is guilty until proven innocent" (pp. 63-64).

One opponent to breastfeeding, Hytten (1991) questioned even the WHO/UNICEF statement in 1979:

> Breastfeeding is an integral part of the reproductive process, the natural and ideal way of feeding the infant and a unique biological and emotional basis for child development. This, together with its other important effects, on child spacing, on family health, on family and national economics, and on food production, makes it a key aspect of self-reliance, primary health care and current development approaches. (Cited in Hytten, 1991, p. 118)

He tried to refute the statement. While he admited many advantages of breastfeeding, he still insisted that the statement is cruel to those who cannot lactate well or those who choose not to breastfeed. He estimated that a third in Western society could not lactate satisfactorily or for various reasons choose not to breastfeed (Hytten, 1991, p. 136). Despite the title "Science and lactation," his argument is more sympathetic to those who do not breastfeed

than scientific. However, the reality is that the majority of low-income, less educated ethnic minority women did not make an informed choice on their feeding methods (Select Committee on Hunger, 1992). In addition, Hytten did not prove whether many women in Western societies are not able to lactate enough. Campbell (1984) named this belief "the insufficient milk syndrome."

> [E]ven women who desire to breastfeed may succumb physiologically to the dominant ideology which undermines their self-confidence, worth, and social value, making them, due to sensitive hormonal responses, truly incapable of producing sufficient milk. (1984, p. 563)

Helsing and King (1982) said that women's confidence in breastfeeding was being undermined by many factors both in the Third World and in industrialized countries. Yamanouchi (1993) distinguished between mothers' worry about insufficient milk and actual insufficient milk supply. False alarms caused some mothers to worry that their milk supply is low. If the baby is gaining well (from birth to six months, a typical weight gain is 4 to 8 ounces per week) and has plenty of wet diapers (usually more than 6 to 8 wet cloth diapers or 5 or 6 wet disposable diapers per day) and bowel movements (2 to 5 bowel movements per day during the first 6 weeks), there is probably nothing wrong with her milk supply. (There are a number of popular misunderstandings about the signs of insufficient milk supply, shown in Appendix D.)

Many women do feel guilty for not breastfeeding. Palmer said, "No woman need feel guilty for 'failing' to breastfeed. She has the

right to feel angry for being denied support and information when she needed it" (Palmer, 1988, p. 60).

Hytten (1991) argued that breast milk substitutes were at least as good as breast milk nutritionally, and in some cases might be better, Jelliffe and Jelliffe (1978) said, "the food industry's claims that their products are 'humanized' or 'just like mother's milk' are biochemically and nutritionally incorrect" (p. 207). According to Riordan (1983), in the attempt to make artificial breast milk, vital nutrients were not included and the composition of formulas has changed "as the lack of essential nutrients became recognized" (p. 7).

Hytten (1991) cited Forbes's argument in 1978 that the particular needs of the rapidly growing baby with low birth weight could not be supplied by breast milk alone. However, even if some low weight babies require additional nutrients, they might need this nutrient in addition to breast milk, not as a substitute. This argument ignored the importance of the protective effect of breast-feeding. Secretory IgA (immunoglobulin) in colostrum has a highly significant protective function against intestinal infections (Jelliffe & Jelliffe, 1978). Riordan (1983) said that the widespread use of formula and cow's milk has produced such allergic reactions as diarrhea or eczema. As Barness (1987) said, many trace substances present in breast milk are under investigation, and some of these may eventually be added to formulas. However, at this point, the

anti-infectious substances of breast milk cannot be artificially created (Barness, 1987).

Hytten (1991) also said that enthusiastic breastfeeding women "derive considerable sensual, even erotic pleasure from the suckling and a sense of pride and satisfaction when the baby is obviously thriving" (p. 131) and in his opinion, the majority of breastfeeding women have no such pleasures. He confused sexual pleasure which some women might experience, with a sense of pride which many women might experience. Often women had ambivalent feelings towards the topic of sexuality. In 1963, Pryor denied sexual feelings in breastfeeding mothers. Later she added, "An occasional mother finds an occasional feeding sexually stimulating, even to the point of orgasm, but this effect is usually transitory" (Pryor, 1973, p. 39). Lawrence (1985) also admited that some women experience some form of sexual gratification during nursing.

Palmer (1988) said that men who are jealous of their partners' breastfeeding may have damaged feeding relationships with their own mothers and seeing the same scene in public may be too inexplicably painful.

Social Barriers to Breastfeeding

Helsing and King (1982) stated that nursing in public is difficult if the breasts are perceived as sex organs:

The L.A. Times on June 30, 1989, reported that a Los Angeles Superior Court Judge ruled in favor of the restaurant whose hostess

asked a breastfeeding woman either to breastfeed her child discreetly or do so in the restroom. Attorney Gloria, representing Kaufman, the breastfeeding woman who alleged she was not given the option of discreetly breastfeeding her infant at her table, blasted the court's decision as "anti-mother and anti-child" (Hernandez, 1989).

Lofton and Gotsch (1983) asserted the right of breastfeeding mothers, pointing out that many people in our society have difficulty in recognizing the baby's basic need to nurse at the breast.

The education on breastfeeding to health workers has also been neglected. Even medical school curricula rarely cover either the technique or the problems of breastfeeding. Although doctors tend to leave the issues of breastfeeding to nurses, the nurses often do not have enough knowlege about breastfeeding and offering a bottle can be the easiest solution to breastfeeding problems their clients have (Helsing & King, 1982).

Several routine hospital procedures, including automatic bottle distribution, provision of a formula gift pack, sedation during delivery, routine orders for initial feedings with glucose water or formula and the requirement of medical clearance for nursing, may create obstacles to successful breastfeeding (Winikoff, 1988). Early introduction of bottles and pacifiers can cause breastfeeding problems (Newman, 1990). And formula samples distributed at hospital discharge have been found to have a significant association

with formula feeding among immigrants (Meftuh, et al., 1991; Romero-Gwynn, 1989).

Formula Companies

Sai (1991), seeming neutral, tried to protect the formula companies as partner to families in many circumstances. However, Palmer (1988) pointed out their major focus on profits. The infant formula industry expanded when mechanization of the dairy industries resulted in large whey surpluses as a waste product during the late nineteenth and early twentieth centuries, and the commonest fat used in formula was coconut oil just because it was low-priced on the world market (Palmer, 1988).

In 1972, the International Organization of Consumer Unions (IOCU) was established. IOCU presented a code of advertising practices for formula to the UN [United Nations) and founded the International Baby Food Action Network (IBFAN) (Marmet, 1993).

In 1977, some citizens working for Infant Formula Action Coalition (INFACT) began a boycott of Nestle in protest of the company's infant food marketing practices. The boycott grew, and after seven years, it succeeded in forcing Nestle to agree publicly to change its practices. However, the change was subtle, and formula companies continued to promote formula in medical settings. They spent a great deal of money asking hospitals to use their particular formula. Between 1983 and 1988, formula companies donated $1.4 million to the American Academy of Pediatrics (Marmet, 1993).

In 1979, WHO and UNICEF held a joint meeting on infant feeding, which led to the WHO Code in 1981. While other industrial countries, such as New Zealand and the EEC countries, decided on moral and health grounds, the Reagan administration rejected the Code after direct lobbying by the formula companies (Palmer, 1988). Because private sector companies were involved, the code of marketing practices remained voluntary and could not be enforced (Marmet, 1993). Japan's abstention from the vote on the Code also allowed the formula companies' activities (Nyuji-you-kona-milk-mondai-wo-kangaeru-kai, 1988). According to Palmer (1988), "Some are worse than others; the Japanese baby food industry is now particularly zealous" (p. 237).

In 1979 IBFAN as a coalition which represents more than 150 citizen groups in nearly 70 countries, was established. The network monitors implementation of the WHO Code.

Working and Breastfeeding

Although employment could be the reason women do not breastfeed, many bottle-feeding mothers do not return to work in the first six months postpartum which is the most important time to breastfeed. Well-educated women who are breastfeeding return to work and maintain lactation at the same time because of the benefits for both mothers and babies (Lawrence, 1988).

Jelliffe and Jelliffe (1978) also said that working women in industrial societies can breastfeed by using various techniques:

1. part-time paid work during breastfeeding is an option;

2. with full-time employment, a baby sitter gives expressed breast milk (kept in the refrigerator or freezer) or formula during the day;

3. if employment is very nearby, mothers return home to nurse; and

4. in a few cases where mothers can make acceptable arrangements, they bring their babies to work with them (Jelliffe & Jelliffe, 1978).

Lofton and Gotsch (1983) also described a number of strategies, such as using accumulated sick leave or vacation times as extension of a paid leave, in order to extend the mothers' time at home with their infants. Some working mothers use the Pregnancy Disability Act in 1979 when the babies are allergic to cow's milk formula and must be breastfed.

In February 1993, the Family Leave Act was signed into law in the US. About 40% of parents in the labor force are now eligible for 12 weeks of unpaid parental leave. This amount is still far behind other industrialized nations. In Sweden, in 1992, a law made the length of paid leave 18 months and a parent can take a 6 hour workday until a child turns 8 years old. In Hungary, the length of paid leave is 18 months with job protection for 3 years (Lopata, 1993). Under the Japanese Labor law, at least 30 minutes of each

"child care hour" can be used for nursing twice a day until the child is 1 year old in addition to lunch and coffee breaks. Length of paid leave is 14 weeks (Nyuyouji-kona-milk-mondai-wo-kangaeru-kai, 1988). The Child Care Leave System that has recently been implemented in Japan allows mothers to have parental leave for 1 year (Hashimoto, 1993).

Some women wean abruptly due to a brief maternity leave. Although the effect of weaning on the health of the mother is seldom an issue, Dr. Gordon wrote, "premature interruption of the pregnancy-delivery-lactation cycle may have lifelong deterious health consequence in females" (cited in Lofton & Gotsch, 1983, p. 44). The Oketani method in Japan also warned of the possibility of health consequences if the breasts were not treated properly by professional massages (Oketani, 1985).

An International Labour Organization Convention (ILO) report (1975) noted certain world trends in legislation for maternity protection, notably as follows:

1. extension of maternity protection schemes to new categories of women workers,

2. prolongation of the period of statutory or prescribed maternity leave (or flexibility as to how much is taken before or after the birth),

3. more liberal provision of extended or extra leave during the child's infancy,

4. higher rates of maternity benefit,

5. more effective protection against dismissal during pregnancy and after confinement,

6. greater encouragement of breastfeeding and wider provision of nursing breaks for mothers,

7. more adequate attention to the safety and health of women during pregnancy and lactation (for example, through transfers to lighter work), and

8. establishment by social security schemes or public bodies of day nurseries to care for infants and children of working parents. (Jelliffe & Jelliffe, 1978, p. 382)

A number of conventions and recommendations that have been adopted by the ILO member states pertain to women and breastfeeding. Minimum maternity protection is defined as:

1. A compulsory period of six weeks leave after confinement.

2. Entitlement to a further six weeks of leave.

3. The provision, during maternity leave of cash benefits sufficient for the full and healthy maintenance of the child, from insurance or public funds.

4. Medical care by a qualified midwife or doctor.

5. Authorization for a mother to interrupt work for the purpose of breastfeeding her child.

6. Protection from dismissal during maternity leave or during any extension of such leave in case of medically certified illness arising out of pregnancy or confinement. (Gibbons, 1988, p. 341)

The Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding, signed by 30 governments in 1990, called on all governments by 1995 to:

1. Enact imaginative legislation protecting the breastfeeding rights of working women and establish means for its enforcement; and

2. Ensure the implementation of the International Code of Marketing of Breastmilk Substitutes so that the marketing of such substitutes is not targeted at employed women. (WABA, 1993)

In 1993, WABA selected the "Mother-Friendly Workplace" as the theme to promote during the second annual World Breastfeeding Week. The goals of WABA 1993 were to:

1. Enable women to breastfeed with confidence by informing them of the benefits of optimal breastfeeding and of their maternity entitlements;

2. Ensure that national legislation to protect the rights of working women to breastfeed is implemented in as many countries as possible;

3. Increase public awareness of the benefits of combining work and breastfeeding to women, children, and society at large;

4. Encourage unions and workers groups to advocate for maternity entitlements which support women workers who breastfeed;

5. Foster the establishment of Mother-Friendly Workplaces everywhere; and

6. Protect cultural practices which support the breastfeeding mother working at or away from home. (WABA, 1993)

WABA said, "every mother is a working woman" (WABA, 1993). Campbell said that work is usually defined as work outside the home and only the work outside the home is valued by the society of capitalism. She stated, "Women's work produced use value but no

exchange value" (Campbell, 1984, p. 557). Breast milk is an especially high value product "produced by the family for family consumption." However, "Without commodity production and distribution via the market, there is no surplus value extraction, i.e., no profit" (p. 552). Palmer (1988) said that women have been producing "a nutritionally balanced, delicious food, a wonder drug that both prevented and treated disease" (p. 1) which could have great market value if scientists developed it artificially; however paradoxically, women are not wealthy and not powerful. Jellife and Jellife (cited in Palmer, 1988) estimated the value of the breast milk of the women of India to equal the milk of a herd of 114 million lactating cows. Rhode (cited in Palmer, 1988) estimated that over 1 billion litres of breast milk produced annually would have the market value of over $400 million. In addition, money saved in health care and fertility reduction would add a further $120 million to the economy.

Sometimes putting her career aside to stay at home with her baby was seen by some mental health professionals as avoiding her own fears of individuation by seeking the protection of home (Phillips, 1992). However, many women who decided to leave their professional positions to mother their children at home, did not necessarily intend to be there the rest of their lives. Cardozo (1986) defined these as sequencing women because they can both have their careers and raise their children through sequencing

their lives, rather than trying to do everything simultaneously. Cardozo, however, warned that mothering at home would not mean doing all the housework. She said that couples should set all housework into a category completely separate from caring for the children. Household chores can be boring, repetitive, and purposeless. Palmer (1988) also said:

> The linking of the two tasks of domestic labour and childcare has marginalised them both. Why is housework linked with childcare when being a business executive is not linked with office cleaning? (1988, p. 252)

In the optimal society, women could combine breastfeeding and working outside if they wish. Or women could choose to stay at home with their breastfed babies with job security and go back to work after their children grow older. Mothering through breastfeeding can be done only by mothers, while other housework can be shared by either the couple or outside helpers.

Social Work and Breastfeeding

Social work professionals seem to have little knowledge of breastfeeding, and little interest in breastfeeding trends. From 1983 to 1993, there are 838 articles related to breastfeeding in professional journals of nursing. In those of medicine, there are 527 articles in 1993, 394 articles in 1992, and 516 articles in 1991. There are 173 articles related to breastfeeding in professional journals of psychology from 1987 to 1993. On the other hand, there is only one article related to "breastfeeding" in

Social Work Research and Abstracts from 1988 to 1993. The one is "Weaning and depression (American Journal of Psychiatry, 145(4), 1988). Lofton and Gotsch (1983) pointed out that physicians, judges, lawyers, social workers, and other professionals are not aware of the increased incidence of breastfeeding and its importance and do not seem to know how to deal with the issues related to breastfeeding.

Lofton and Gotsch (1983) said that today's breastfeeding mothers have to deal with custody and visitation arrangements following a divorce. They pointed out the strong need of a young child for the consistent presence of the mother and the need for regular visits with the father, which should be shorter initially, and then increased based upon the child's developmental maturity. They said that the best interest of the child did not mean an equal time with both parents, which might cause a traumatic separation, but such an arrangement that the child did not develop psychological problems, such as separation anxiety. This issue is more relevant for the breastfeeding mother-child because shared or split custody, as well as an overnight or weekend visitation, interferes with their breastfeeding relationship both mentally and physically (Lofton & Gotsch, 1983). Sugarman (1989) also said,

> judges, lawyers and court family officers are often unaware that in the cases involving breastfeeding, no other attachment figure can substitute for the nursing mother in the very young child's emotional environment. (Sugarman, 1989, p. 20)

They do not understand that a sudden rupture can cause physical problems, such as a plugged duct in mothers, and can cause a severe emotional problem. Also they do not understand that the loss of the anti-infectional effects from breast milk can cause health problems in the child (Sugarman, 1989).

Sugarman also pointed out one important problem for social work. She said that child protective agencies and mental health professionals may label late weaning and family co-sleeping as child abuse:

> Perfectly adequate mothers have been labeled inadequate or neglectful for nursing older toddlers or preschoolers. This intrusion in a private parenting decision may occur when a family comes to the attention of the protective agency through an anonymous report or during an investigation into allegations of abuse by someone other than the child's mother. (Sugarman, 1989, p. 20)

David Phillips, PhD, a clinical psychologist, said that most mental health professionals are unaware of different parenting approaches in breastfeeding families from the main stream culture (Phillips, 1992). So breastfeeding related issues, such as co-sleeping, can be interpreted pathologically:

> Besides concerns over incest, it might be seen as a mother's attempt to foster dependency in the child. It may also be regarded as an attempt to place a wedge between wife and husband. It may be seen as an attempt to avert intimate and sexual issues in the marriage. (Phillips, 1992, p. 84)

In 1992, a mother in New York state was charged with child abuse after she called a volunteer center for help regarding sexual feelings she experienced while nursing her toddler. The child was

placed in foster care for almost a year. While the social service agency in New York has made it clear to the media that they do not remove children for being breastfed (Baldwin, 1992), this example

> reflects the viewpoint of our society and of some mental health professionals. . . . This case illustrates the seriousness of a situation where mental health professionals are uninformed about normal mother-child interactions." (Phillips, 1992, p. 83)

In her letter to Mothering, the mother claimed that she was "battling biased social workers and an ignorant and slow-moving court system" (O'Mara, 1991, p. 17).

Spock (1957, 1976) advised parents to move children out of the parents' bed by 6 months because children may become dependent on this sleep arrangement, be afraid and unwilling to sleep anywhere else, and may be upset by the parents' intercourse. He also advised not letting children sleep in their parents' bed for any reason, even if the child wakes up frightened at night. However, sharing a bed with breastfed babies makes night nursing easier (Sears, 1985). "In cultures where breastfeeding is the norm, bed sharing is frequently as familiar as the family dinner table in our own culture" (Thevenin, 1987, p. 4).

Many pediatricians and other child-rearing experts in the US believe that the early night-time separation of infants from their parents is essential for the infants' healthy psychological development. A cross-cultural study on the decisions of middle-class US and Highland Mayan parents regarding sleeping arrangements

during their child's first 2 years shows that all 14 Mayans practiced co-sleeping whereas none of the 18 US infants slept in the bed with their mothers on a regular basis as newborns (Morelli et al., 1992).

The pattern of night feeding in the Mayan families was for the baby or toddler to sleep with the mother until shortly before the birth of another child (about age 2 or 3) and to nurse on demand. They did not need to wake up for feeding, just to turn and make the breast accessible to the babies. Night feedings were therefore not a problem for the Mayan mothers or for their infants and toddlers (Morelli et al., 1992).

Japanese mothers also sleep with children. A study of Caudil and Plath (cited in Morelli et al., 1992) showed that Japanese couples often sleep in different rooms "in order to provide all children with a parental sleeping partner when family size makes it difficult for parents and children to share a single room" (p. 605). Space considerations did not seem to be a significant factor in co-sleeping practices for Japanese families (Morelli et al., 1992).

The middle-class US families' avoidance of co-sleeping is connected with a stress on independence and self-reliance, while parents in communities where co-sleeping is common may regard co-sleeping as important for interdependence and intimacy. Mayan parents may regard the US practice of having infants and toddlers sleep in separate rooms as "merciless" and "tantamount to child neglect" (Morelli et al., 1992, p. 608).

While Mayan toddlers did not use security objects for falling asleep, many US children who were expected to fall asleep alone took a favorite object, such as a blanket, to bed with them. Morelli et al. (1992) wondered that some US parents seem to prefer that their children become attached to and dependent on an inanimate object rather than a person.

Sleep problems were usually defined in the US as "night waking that involved the parents, or bedtime struggles, which occurred three or more nights each week accompanied by conflict or distress" (Schachter, Fuchs, Bijur, & Stone, 1989). However, in some cultures where breastfeeding is the norm, infants' night waking is not considered as a sleeping problem, but a natural process, and mothers who employed co-sleeping can easily comfort their infants by breastfeeding (Zuckerman, Stevenson, & Bailey, 1987). Schachter et al. (1989) pointed out that the data of Japanese, where the incidence of co-sleeping was also high, seemed to negate the positive association between co-sleeping and sleep problems. However, if parents define night waking of infants as a sleeping problem, breastfeeding or co-sleeping could be associated with "sleep problems" because they are more likely to notice their infants night waking. A study on co-sleeping and "sleeping problems" in the Hispanic population (Schachter et al., 1989) showed that the incidence of co-sleeping in Hispanics was significantly higher than that of white middle-American urban

children of the same age and sex and also significantly associated with sleep problems. One study of 308 middle-class preponderantly white mothers (Zuckerman et al., 1987) indicated that children who were breastfed at 8 months were more likely to have sleep problems, but not persistent sleep problems.

Sudden Infant Death Syndrome (SIDS) is another issue. While the death of a baby had been attributed to "overlaying by the mother or wet nurse," many experts on SIDS no longer list "overlaying" as one of the causes of SIDS (Sears, 1985, p. 40). It is said that urban industrial societies where family co-sleeping continues to be the norm have a low incidence of SIDS. In 1991 the incidence of SIDS was 0.15 per 1,000 live births in Tokyo and 0.053 per 1,000 live births in Fukuoka, Japan, but 1.5 per 1,000 live births in the US. Also among five Asian-American subgroups living in California, the incidence of SIDS is also low (McKenna, 1992). McKenna (1992) thought that human infants are designed biologically and psychologically to sleep with their caregivers, and solitary infant sleeping is a possible environmental cause of SIDS as the infants sleep too much and too long without small and continuous sensory-based interruption (arousals) from a co-sleeping partner. William Sears, MD, Assistant Professor of Pediatrics at the University of Southern California, also proposed the hypothesis that unrestricted breastfeeding and co-sleeping would lower the risk of SIDS (Sears, 1985).

A recent Japanese newspaper article reported that half of SIDS can be prevented by the environment. Nishida, MD, suggested that mothers discover new merits in Japanese traditional child rearing practices, such as co-sleeping (Yomiuri Newspaper, 1993, December 3, p. 14).

Although many pediatricians remain concerned that co-sleeping may foster dependency, may be sexually arousing, may reflect poor limit setting and may contribute to sleep problems, anthropological data suggesting that co-sleeping is widespread in non-Western societies seem to challenge the pediatric prohibition against this practice, especially as it applies to urban minorities (Schachter et al., 1989). The study of Caudill and Plath (cited in Montague, 1971) found that a Japanese co-slept over half of his/her life, first as a child and then as a parent. They stated that suicide was most likely occur in Japan when he/she did not co-sleep with a family.

The study on 3 to 4 month old infants by Caudill and Weinstein (cited in Montague, 1971) showed that Japanese mothers spend more time with their infants and emphasize physical contact over verbal interaction and have as a goal a passive and contented baby, while American mothers spend less time with their infants, emphasize verbal interaction rather than physical contact, and have as a goal an active and self-assertive baby. They stated that babies in two countries have learned to behave in different and culturally

appropriate ways by 3 to 4 months. Montague (1971) said that childrearing differences resulted in two different personalities: Japanese were "more 'group' oriented and interdependent in their relation with others" and Americans were "more 'individual' oriented and independent" (p. 294).

Anna Freud (cited in Montague, 1971) stated:

> it is a primitive need of the child to have close and warm contact with another person's body while falling asleep, but this runs counter to all the rules of hygiene which demand that children sleep by themselves and not share the parental bed. . . . The infant's biological need for the caretaking adult's constant presence is disregarded in our Western culture. (Montague, 1971, p. 291)

Conclusion

The researcher has examined breastfeeding issues in the US and Japan. As Japan has been influenced by Western culture especially by the US after WWII, there are similar barriers to breastfeeding today, such as infant formula promotion. However, there is clearly a difference. Traditionally Japanese have employed family co-sleeping and breastfeeding on demand because it incorporates their cultural value of interdependence. Although some Japanese medical professionals advise mothers to wean babies around one year because of the Western influence, breastfeeding in general is promoted in public, and very few mothers choose bottle-feeding at the time of the birth. Nursing in public is more acceptable.

Many American experts believe that co-sleeping has risks and may result in accidental injury and the death of children. Very few American professionals advocate co-sleeping (Crook, 1981). It is interesting that Mayan parents thought letting infants or toddler sleep in a different room is equivalent to child neglect in their culture and some professionals thought that co-sleeping could prevent SIDS.

CHAPTER 3

METHODOLOGY

In this chapter, the researcher will explain the methodology of the research, including its design, sample, instrument, data collection, data analysis and limitations.

Design

Because of both the sensitive nature of this study and the lack of research in the area, an exploratory design was used. Personal interviews were conducted in Japanese, examining the following questions:

1. What is the level of acculturation?
2. How do Japanese get breastfeeding information and support?
3. Why do Japanese choose breastfeeding?
4. How long do Japanese think is a desirable duration of breastfeeding, how long was the actual duration and how long is the expected duration?
5. What is the cultural ritual (e.g., massage) or belief (e.g., about food) on breastfeeding among Japanese?
6. How do Japanese feel about nursing in public? Have they been advised against nursing in public?

and the American Academy of Pediatrics recommends that infants be fed breast milk for the first 6 to 12 months in its Statement in 1992 (La Leche League International, 1992). The majority of subjects were obtained through the mailing list of La Leche League, the South Bay chapter. The mailing list included all the Japanese who had contacted the La Leche League Leader for breastfeeding counselling or had attended the Japanese La Leche League meetings. Some of the mailing list were excluded because they were not living in the South Bay, and many had already moved out and could not be reached. Therefore, the sample was almost all the Japanese whom the researcher could reach at the time of the interview. The researcher also used snowball sampling.

Instrument

The researcher interviewed the selected sample face to face in Japanese because "all interactions with ethnic minority research participants should be conducted in the language of their choice" (Marin & Marin, 1991, p. 60). Being the same ethnicity as the researcher, subjects might feel less threatened to answer personal questions, enhancing the quality of the data and the rate of participation in the study (Marin & Marin, 1991). Interviews were recorded in Japanese for later analysis because the researcher thought that a tape recorder would be threatening to this population. The researcher conducted open-ended questions without showing the population any sample answers.

Data Collection

The researcher called potential participants, asked their birth place and breastfeeding status, informed them of the nature of this study and its confidentiality and then gave them an opportunity to volunteer for the study by scheduling an appointment time with the researcher. The researcher excluded the La Leche League Leader and the Leader Applicant because she wanted to minimize bias, but included Peer Counsellors. Of those whom the researcher could reach, one refused to volunteer, and one cancelled an appointment. Interviews were conducted at the respondents' homes or at places convenient to them. Two respondents preferred the researcher's home to their homes. There were no respondents who chose other places.

Before the interview, volunteers were given an informed consent form written in both English and Japanese to read and sign.

Standardized open-ended interviews with contingency questions were conducted in order to ensure that all interviews were conducted in a consistent manner. The demographic and acculturation level questions were asked in the end of the interview:

1. How old are their children? Where were they born? Were siblings breastfed?

2. How old are the interviewees? How much education do they have? Do they have cars? How many rooms do they have in a house/apartment?

3. How many years have they lived in the US?

4. Is their husband Japanese? If not, what ethnicity?

5. Do their doctors speak Japanese?

6. Did their mothers and their mothers-in-law breastfeed? How long did their mothers and their mothers-in-law breastfeed?

7. Who helped with their housework after the babies' birth?

8. Do they do paid work? Outside? At home? Full-time? Part-time? When did they resume work?

9. How many times did they hire baby sitters during the first year? Do they express their milk for the babies, or use formula when they use baby sitters?

10. How many close American friends do they have? How many close Japanese friends do they have?

11. Are they aware of social agencies available for family problems?

13. How fluent is their English?

The remainder of the interview consisted of questions that asked the interviewees to describe:

1. their breastfeeding support systems;

2. the reasons they chose breastfeeding;

3. the desirable duration of breastfeeding and the actual weaning time;

4. their diet and use of massage;

5. nursing in public;

6. sleeping arrangements;

7. nursing pattern;

8. reactions to advice on breastfeeding;

9. formula use;

10. breastfeeding problems and solutions;

11. their ideas why some people do not breastfeed; and

13. their feelings about breastfeeding.

Data Analysis

The researcher translated the record of each interview into English and put the records into the computer. The response to the open-ended questions was coded, entered in the computer and then analyzed in an attempt to locate patterns, according to their demographic status and acculturation. Statistical analyses were run on an IBM computer by using SPSS/PC+4.0.

Limitations

Because of the exploratory nature of the study, the major limitations involve sample size and its lack of representativeness of the larger population. Those who know the researcher as a La Leche League Leader might answer in favor of La Leche League

philosophy. Those who do not know the researcher might feel threatened to acknowledge long term nursing, or co-sleeping or criticism about their doctors. Respondents who were on the mailing list of La Leche League were more likely to be those who have attended La Leche League meetings, and respondents obtained by snowball sampling were more likely to be friends of the other respondents. Therefore, they were more likely to have breastfeeding friends and support in the South Bay and may not be representative of the general Japanese population in the US.

Although the sample size can be a problem, the researcher still supports it due to time constraints because the researcher would have to use more snow ball samplings to reach more mothers. In addition, because of the small size, it is felt that the amount of time spent with each mother in the study enabled them to express their experiences and feelings in depth.

CHAPTER 4

FINDINGS

In this chapter, the researcher will show the results of the research regarding the breastfeeding practices of the sample and examine the correlations between the variables.

Demographic Data

The sample consisted of 20 Japanese mothers who were born in Japan, recently came to the US, live in the South Bay area in Los Angeles, and breastfed the youngest baby for more than 6 months.

Table 1 summarizes the demographic characteristics of the respondents of this study. The age of the respondents ranged from 26 to 40. More than half (55%) of them were 31 to 35. Their education ranged from a high school diploma to a graduate degree. Half of the respondents had a two year college degree. All of the respondents' families owned two cars. Fifty-five percent of the respondents lived in a house or apartment with three bedrooms. Eighty percent of them had no paid work. The age of the youngest child ranged from 6 months to 35 months. Fifty-five percent of the respondents were still breastfeeding. Sixty-five percent of the respondents had only one child, and 35% had two children. Of the respondents who had only one child, only one mother (5% of the

Table 1

Demographic Characteristics of the Sample (N = 20)

Category Label	Number	Percent
Age of respondent		
26-30	5	25
31-35	11	55
36-40	4	20
Level of education		
High school diploma	5	25
2 year college degree	10	50
4 year college degree	4	20
Graduate degree	1	5
Living standard I		
Own her car	20	100
Living standard II		
1 Bedroom	1	5
2 Bedrooms	6	30
3 Bedrooms	11	55
4 Bedrooms	2	10
Paid work		
No paid work	16	80
Full time	1	5
Home business	2	10
Combination of part time and home business	1	5

Table 1—Continued

Category Label	Number	Percent
Age of the Youngest Child		
6-8 months		
Already weaned	0	0
Still breastfeeding	1	5
9-11 months		
Already weaned	0	0
Still breastfeeding	1	5
12-18 months		
Already weaned	1	5
Still breastfeeding	5	25
19-23 months		
Already weaned	1	5
Still breastfeeding	0	0
24-29 months		
Already weaned	3	15
Still breastfeeding	2	10
30-35 months		
Already weaned	4	20
Still breastfeeding	2	10
Siblings of the youngest child		
No siblings	13	65
One sibling	7	35
Both breastfed	4	20
Older not breastfed	3	15
Birth place of children		
If no siblings		
Only child born in Japan	1	5
Only child born in US	12	60
If a sibling		
Both born in Japan	0	0
Only older born in Japan	4	20
Both born in US	3	15

total) gave birth in Japan and 12 mothers (60% of the total) gave birth in the US. Of the respondents who had two children, three (15% of the total) gave birth to both children in the US, and four (20% of the total) experienced child birth in both countries.

Acculturation

The extent of the acculturation of the sample is shown in Table 2.

The respondents had been in the US for several years. The range was from less than 2 years to more than 10 years. The greatest number (30%) had stayed for 4 to 5 years. Eighty-five percent of the respondents' husbands were Japanese. The majority (90%) had Japanese speaking pediatricians.

Ninety percent of the respondents had more than four close Japanese friends while only 15% of the respondents had more than four close American (non-Japanese) friends. Thirty-five percent had no close American friends.

Most of the respondents reported that they spoke (50%), read (45%), and wrote (50%) English "so so." Thirty-five percent of respondents either never spoke English or spoke it a little. This self-report showed that the respondents were more likely to read English better than they spoke it.

The researcher calculated the Acculturation Index, which consisted of the total scores: the place the child was born, the

Table 2

Acculturation of the Sample (N = 20)

Category Label	Number	Percent
Stay in US		
Less than 2 years	2	10
2-3 years	3	15
3-4 years	3	15
4-5 years	6	30
5-9 years	3	15
More than 10 years	3	15
Husband		
Japanese	17	85
Japanese-American	1	5
Other Asian	1	5
White	1	5
Close friends		
None		
American	7	35
Japanese	0	0
1		
American	5	25
Japanese	0	0
2-3		
American	5	25
Japanese	1	5
4-5		
American	0	0
Japanese	5	25
6-9		
American	1	5
Japanese	5	25
10-		
American	2	10
Japanese	9	45

Table 2—Continued

Category Label	Number	Percent
English fluency		
Never		
Speak	1	5
Read	1	5
A little		
Speak	6	30
Read	3	15
So-so		
Speak	10	50
Read	9	45
Fluent		
Speak	2	10
Read	6	30
Completely fluent		
Speak	1	5
Read	1	5
Pediatrician		
Cannot speak Japanese	2	10
Speak Japanese	18	90
The use of a Babysitter during the first year		
Never	14	70
Once a year	2	10
Less than once a month	1	5
2-4 times a month	1	5
Once a week	1	5
Every weekday	1	5

Table 2—Continued

Category Label	Number	Percent
Awareness of social services in the Japanese language		
Yes	13	65
Little Tokyo Service Center	1	5
Japanese Help Line (Little Company of Mary Hospital)	6	30
Private counseling services	1	5
Don't remember the name	4	20
Don't know the name	1	5
No	7	35

length of stay in the US, the husband's ethnicity, the number of close American friends, the fluency of English. The range is from 9 to 26. The mean is 14.1. The higher the score, the more acculturated the respondents.

The majority (70%) of the respondents had never hired baby sitters during the child's first year. Only those who had paid jobs used baby sitters regularly. One who used a baby sitter every weekday for her full time job, reported that the baby sitter was her mother who she paid for baby sitting her child. The other who used a baby sitter weekly had a home business and reported that she could nurse her baby even when she used a baby sitter because both her baby and she stayed at home. While 65% of the respondents said that they were aware of social services where the Japanese language is available, 25% could not identify the name of the social services, and only 2 respondents (10%) knew someone who used the services.

Support System

The support system of the sample is shown in Table 3.

Forty-five percent of the respondents' mothers breastfed the respondents. The range of breastfeeding duration was from less than 1 year to 2 years. Fifty-five percent of the respondents' mothers-in-law breastfed the respondents' husbands. The range was from less than 1 year to 3 years.

Table 3

Support System of the Sample (N = 20)

Category Label	Number	Percent
Respondent's mother's breastfeeding experiences		
Breastfeeding	9	45
Less than 1 year	2	10
1 year	1	5
1 year and a half	2	10
2 years	1	5
Don't know the duration	3	15
Formula or combination feeding	11	55
Respondent's mother-in-law's breastfeeding experiences		
Breastfeeding	11	55
Less than 1 year	2	10
1 year	2	10
1 year and a half	1	5
2 years	2	10
3 years	2	10
Don't know the duration	2	10
Formula or combination feeding	7	35
Doesn't know choice	2	10

Table 3—Continued

Category Label	Number	Percent
Family support of choice of breastfeeding		
Husband		
Support/agree	14	70
Neutral/indifferent/no comment	6	30
Doubtful/concerned about milk supply	0	0
Mother		
Support/agree	12	60
Neutral/indifferent/no comment	5	25
Doubtful/concerned about milk supply	3	15
Father (n = 17)		
Support/agree	4	23.5
Neutral/indifferent/no comment	13	76.5
Doubtful/concerned about milk supply	0	0
Mother-in-law (n = 19)		
Support/agree	6	31.6
Neutral/indifferent/no comment	8	42.1
Doubtful/concerned about milk supply	5	26.3
Father-in-law (n = 19)		
Support/agree	4	21.1
Neutral/indifferent/no comment	15	78.9
Doubtful/concerned about milk supply	0	0
Helpers after baby's birth		
Respondent's mother		
1 week	1	5
2-3 weeks	3	15
4-7 weeks	4	20
2.5 months	1	5
4 months	1	5
None	10	50
Respondent's mother-in-law		
2-3 weeks	2	10
4-7 weeks	2	10
None	16	80

Table 3—Continued

Category Label	Number	Percent
Breastfeeding support group		
Have a support group	17	85
Attended a few meetings	2	10
Attended more than 4 times	15	75
No support group	2	10
Used before the first baby	1	5
Time when started to use the support group		
Pregnancy	12	60
After the baby was born	5	25
Used before the first baby	1	5
Never used	2	10
La Leche League member		
Regular member	5	25
Peer counselor (member)	3	15
Non-member, but used for 1 year	2	10
Non-member	10	50
Breastfeeding friends		
None	1	5
1-2	1	5
3-5	2	10
6-9	9	45
10-	7	35

Seventy percent of the respondents reported that their husbands supported their choice of breastfeeding while 30% of the respondents reported that their husbands were either neutral or indifferent or had no comment about the feeding choice. Sixty percent of their mothers supported the choice of breastfeeding; one-fourth (25%) was either neutral or indifferent or had no comment about the choice of breastfeeding, and 15% of their mothers commented on their concern about the respondents' milk supply. About one-third of their mothers-in-law supported the choice of breastfeeding, about 40% were either neutral or indifferent or had no comment about the choice, and about one-fourth of their mothers-in-law commented on their concern about the respondents' milk supply. The majority of the respondents' fathers and fathers-in-law were neutral or indifferent or had no comment on the feeding choice (76.5%, 78.9% respectively).

Half of the respondents' mothers came and helped with the housework after the birth of the babies. Only one respondent's mother was living in the US, while others visited the respondents from Japan. Twenty percent of the respondents' mothers-in-law came and helped with the housework. Of those who came and helped the respondents, the majority (75%, 100% respectively) of their mothers and their mothers-in-law stayed for 2 to 7 weeks.

The majority (85%) had a breastfeeding support group, but only 40% were La Leche League members at the time of the

interview, including three Peer Counsellors (15%). Half of the respondents had never been members of La Leche League. Sixty percent of the respondents started to use the support group when they were pregnant. Forty percent of the respondents had 6 to 9 breastfeeding friends, and 35% of the respondents had more than 10 breastfeeding friends.

The researcher calculated the Breastfeeding Support Index, which consisted of the total scores: the respondent's mother's breastfeeding experience, the respondents' mothers-in-law's breastfeeding experience, the number of breastfeeding friends, the use of a support group, doctor's support, husband's support, mother's support, father's support, mother-in-law's support, father-in-law's support, and other's support of their choice of breastfeeding. The range is from 13.0 to 26.0. The mean is 19.6. The higher the score, the more Breastfeeding Support the respondents received.

The researcher also calculated the General Support Index, which consisted of total scores: the respondent's mother's and mothers-in-law's help after the birth of the babies and the number of Japanese close friends. The range is from 3.0 to 7.0. The mean is 4.8. The higher the score, the more the support available to the respondents.

Choice of Breastfeeding

The choice of breastfeeding reported by the sample is shown in Table 4.

Fifty-five percent of the respondents stated that the strongest reason for their choice of breastfeeding was "a matter of course" because they believed "breastfeeding is natural." One mother said that she had been familiar with mothers nursing in the park in Japan since her childhood and she had naturally connected breastfeeding with babies. Fifty percent of the respondents listed "baby's health" as another primary reason. "Economic reasons," "convenience," and "bonding" were equally selected by 15% of the respondents.

The most influential person was a Japanese child birth instructor in the US (35%), the respondent's mother or step-mother (20%), and friends (20%). It was interesting to note that three (15%) said they themselves were the biggest influence, and another three (15%) said no one.

The respondents got breastfeeding information during pregnancy from the support group (45%), books (30%), the child birth class (30%), a magazine (15%), friends (10%), and none or their own experiences (15%).

Weaning

The weaning experiences of the sample are shown in Table 5. The respondents introduced solid food to their babies from 2

Table 4

Choice of Breastfeeding (N = 20)

Category Label	Number	Percent
The strongest reason		
Natural, a matter of course	11	55
Baby's health	10	50
Economic reasons	3	15
Convenience	3	15
Bonding, possessiveness	3	15
Other	1	5
Most influencial person		
Child birth instructor	7	35
Mother or step-mother	4	20
Friends	4	20
Self	3	15
Husband	1	5
Teacher	1	5
La Leche League leader	1	5
Other breastfeeding people	1	5
None	3	15
Breastfeeding information during pregnancy		
Support group	9	45
Book	6	30
Child birth class	6	30
Magazine	3	15
Friends	2	10
None or own experiences	3	15

Note: Total exceeds 100% owing to multiple answers.

Table 5

Weaning (N = 20)

Category Label	Number	Percent
Introduction of solid food		
2 months	1	5
4 months	1	5
5 months	3	15
6 months	6	30
7 months	4	20
8 months	2	10
9 months	1	5
10 months	2	10
Desirable duration of breastfeeding		
12 months	6	30
13-18 months	3	15
24 months	9	45
36 months	2	10
Reason for desirable duration		
Baby won't be hurt at this age. Can wean easily.	2	10
No specific reason. Good time.	5	25
Mother feels annoyed. Shameful.	3	15
Be independent. Child's development.	6	30
No negative feeling toward late weaning	4	20

Table 5—Continued

Category Label	Number	Percent
Actual Duration of Breastfeeding (n = 9)		
6 months	1	11.1
7-11 months	1	11.1
12 months	0	0
13-18 months	3	33.3
19-23 months	2	22.2
24-35 months	2	22.2
Reasons of weaning (n = 9)		
Mother's illness or difficulties Without doctor's advice	3	33.3
Doctor's advice (Medical reasons)	2	22.2
Less milk	2	22.2
Natural weaning	1	11.1
Hard night nursing	1	11.1
Expectation of duration (n=11)		
13-18 months	2	18.2
24 months	6	54.5
36 months	2	18.2
60 month	1	9.1
Reasons for expected duration (n = 11)		
Baby's reasons to nurse	5	45.5
Mother's reasons to nurse	1	9.1
Both benefit from nursing	1	9.1
Baby's reasons to wean	2	18.2
Mother's reasons to wean	2	18.2

months of age to 10 months of age. The greatest number (30%) reported that they started solid food when their babies were 6 months old. The respondents thought that the most desirable duration of breastfeeding would be 12 months (30%), 13 to 18 months (15%), 24 months (45%), and 36 months (10%). The actual duration of breastfeeding (N = 9) was 6 months (11.1%), 7 to 11 months (11.1%), 13 to 18 months (33.3%), 19 to 23 months (22.2%), and 24 to 35 months (22.2%). Reasons for weaning were the mother's illness or difficulties (33.3%), doctor's advice (22.2%), less milk (22.2%), natural weaning (11.1%), and hard night nursing (11.1%). Of the respondents who were still breastfeeding (N = 11), more than half (54.5%) expected 24 months as the duration of breastfeeding. Two (18.2%) expected 13 to 18 months; another two (18.2%) expected 36 months, and one (9.1%) expected 60 months. Reasons for the expected duration were the baby's reasons to nurse, such as feeling of security or "the baby loves it" (45.5%); the mother's reasons to nurse, such as self-fulfillment or "skinship" (this is an English word coined in Japan; it means skin-to-skin contact that promotes bonding and is believed to facilitate healthy development of children) (9.1%), the baby's reasons to wean, such as "the baby will be big enough" (18.2%); the mother's reasons to wean, such as the feeling of nuisance or "want to go to school" (18.2%), and one respondent (9.1%) expressed benefits for both.

The greatest number of the respondents (45%) reported that the actual duration or the expected duration of breastfeeding was longer than the desirable duration of breastfeeding. Thirty-five percent of the respondents reported that the desirable duration of breastfeeding and the actual duration or the expected duration were the same. Twenty percent reported that the actual duration or the expected duration was shorter than the desirable duration. Of those who reported a shorter duration, three respondents (75%) had already weaned.

Let us look at these three cases. One respondent said that she intended to wean only temporarily because of her medication, but her baby would not nurse any more after she finished taking the medication. She nursed for 19 months. Because she remembered euphoric feelings, she said, "It is so intense that I feel even jealous of others nursing now." The other respondent said that the doctor asked her to reduce nursing times and others recommended her to wean because of her medication. She decided to wean even though she wanted to continue. She said, "Now I miss him because I had weaned and cannot nurse him while holding. I feel like being torn off a part of my body." She nursed for 11 months. The other respondent weaned because of the doctor's orders. The doctor threatened to report her for child abuse of her allergic baby if she didn't wean because the doctor thought her baby's allergy was caused by her breast milk. She weaned her baby at 6 months and

used a hypo-allergic formula made from corn. A blood test at 1 year in Japan revealed that her baby was allergic to corn. She stopped using the formula. She said, "Doctors need more knowledge of breastfeeding."

No significant relationship is found between the duration of breastfeeding (the actual duration as well as the expected duration) and the extent of acculturation. Group 1 (The Acculturation Index < 13, Mean = .56, SD = .53) Group 2 (The Acculturation Index > 12, Mean = .67, SD = .51), t = -.35, p = .73 No significant relationship is found between the duration of breastfeeding and the breastfeeding support the respondents received. Group 1 (The Breastfeeding Support Index < 20, Mean = .56, SD = .53) Group 2 (The Breastfeeding Support Index > 19, Mean = .45, SD = .52) t = .43, p = .67. However, the results show some correlation between the duration of breastfeeding and the general support available to the respondents, but not at a significant level. Group 1 (the General Support Index < 5, Mean = .44, SD = .53) Group 2 (The General Support Index > 4, Mean = .81, SD = .41) t = -1.8, p = .09.

Cultural Beliefs

Seventy-five percent of the respondents had heard of or believed that certain foods would help to produce breast milk. Most of these foods were traditional Japanese foods such as mochi (rice cakes), rice, Japanese noodles, beans, gobou (burdock), fish soup, soybean soup, or a low calorie diet. Only one respondent (5%) had

heard that dairy products helped to produce breast milk. The greatest number (45%) of the respondents answered that mochi (rice cakes) helped to produce milk (Table 6).

Although one mother, whose youngest child was born in Japan, got breast massage in Japan, 90% had never had anyone massage their breasts for the purpose of lactation in the US. However, only 10% of the respondents reported that they felt worried about their milk supply due to the unavailability of massage in the US. Thirty-five percent of the respondents massaged themselves for the purpose of increasing their milk. Thirty percent of the respondents massaged their breasts for other reasons (e.g., plugged ducts or engorgement) than increasing milk. Of those who massaged to increase milk (N = 7), five (71.4%) reported that the Japanese child birth class instructor advised breast massage (Table 7).

Nursing in Public

The respondents' feelings about nursing in public vary (Table 8). The greatest number of the respondents (30%) never felt shy because they were nursing in public as a matter of course. The next greatest number of the respondents (25%) said that they were "not shy if discrete" or "shy but OK if discrete."

Half of the respondents had received some kind of advice against nursing in public. The greatest number of the respondents received such advice from friends (30%), from their husbands

Table 6

Cultural Beliefs about Food Reported by the Sample[a] (N = 20)

Category Label	Number	Percent
Certain foods that help to produce milk		
Rice cakes (mochi)	9	45
Soup	4	20
Fish soup	2	10
Soybean soup	1	5
Not specified	1	5
Noodles	3	15
Rice	3	15
Beans	3	15
Soy	1	5
Azuki	1	5
Soramame	1	5
Burdock (gobou)	1	5
Dairy products	1	5
Low calorie diet	3	15
Liquid	2	10

[a]Total exceeds 100% due to multiple answers.

Table 7

Massage Use Reported by the Sample (N = 20)

Category Label	Number	Percent
Someone massaged breasts for lactation		
Yes in the Us	1	5
Yes in Japan	1	5
No	18	90
Worry about milk supply without massage		
Yes	2	10
No	18	90
Self-massage		
Massage to increase milk	7	35
Massage for other reasons (plugged ducts, engorgement)	6	30
Never massaged	7	35
Who advised breast massage (for any reason)[a]		
Japanese child birth class instructor	5	25
Support group	3	15
Nurse or midwife in Japan	2	10
Family	2	10
Doctor in Japan	1	5
Friends	1	5
Book	1	5
Never advised	6	30

[a]Total exceeds 100% due to multiple answers.

Table 8

Nursing in Public Reported by the Sample (N = 20)

Category Label	Number	Percent
Feelings about nursing in public		
Never shy; as a matter of course, natural	6	30
Not shy if discrete; shy but okay if discrete	5	25
Only shy at first, not shy any more	3	15
Must be discrete because of people's feelings	3	15
Shy	1	5
Shy but accept as a necessity	1	5
Even feel proud	1	5
Advice against nursing in public (n = 10)		
From whom		
Friends	6	30
Husband	2	10
Mother	1	5
Public person	1	5
What		
Must be discrete	6	30
People don't nurse in public	2	10
Asked to go to other places	1	5
Just teasing	1	5
What place mothers usually use to nurse outside their homes[a]		
Car	13	65
Restroom or ladies lounge	8	40
Restaurant, mall	4	20
Corner	4	20
Nursing facilities	3	15
Friends' houses	3	15
Anywhere	3	15
Seldom went outside	2	10
Fitting room	1	5

[a]Total exceeds 100% due to multiple answers.

(10%), from her mother (5%), or a public person (5%). The advice was "must be discrete" (30%), or "people don't nurse in public (in the US)" (10%). One mother reported that her friend told her that discrete nursing was necessary in the US. Another mother who was warned by a public person was asked to go to places such as rest-rooms or fitting rooms when she breastfed her baby in a department store. On the contrary, the other respondent said that she could nurse anywhere in the US if she had nursing clothes (clothes that had a discrete opening for nursing).

The majority (65%) usually nurse babies outside their homes in their cars. Although 40% of the respondents used restrooms or ladies lounges in department stores, one respondent said that she did not like to use restrooms in department stores in the US. She wished she had had the nursing facilities that every department store has in Japan.

Family Co-Sleeping

Co-sleeping seems to be the norm among this population (Table 9).

The sample employed co-sleeping regardless of how many bedrooms they had. Most respondents (95%) not only shared the room at the time of the interview, but also shared the bed with their babies or toddlers. Eighty percent of the respondents said that they had shared the room since their babies were born regardless of whether the babies were still nursing or not.

Table 9

Co-Sleeping Arrangement Reported by the Sample (N = 20)

Category Label	Number	Percent
Sharing the same room with the baby		
After the baby was born until now (still nursing)	8	40
After the baby was born until now (even after weaning)	8	40
After the baby was born until weaning	1	5
For less than 6 weeks to several months after the baby was born and resumed from 10-12 months to now	3	15
The use of a crib		
Never used in the US	4	20
Used for a nap only	4	20
Used it attached (next to) the mother's bed	4	20
Used it separately in the same room	4	20
Used it in a different room	3	15
Used it attached to the bed but moved to a different room	1	5
Sharing the same bed or futon with the baby		
From birth to now	7	35
From 1-3 months to now	4	20
From 4-6 months to now	1	5
From 7-9 months to now	1	5
From 10-12 months to now	4	20
From 13 months and up to now	2	10
Never	1	5

Table 9—Continued

Category Label	Number	Percent
Sleeping in a different room from the husband		
From birth until now	4	20
From a certain time until now	4	20
Until weaning	1	5
For less than 6 weeks but not now	2	10
For a few months but not now	1	5
For several months but not now	1	5
Only occasionally	3	15
Never	4	20
The husband's attitude toward co-sleeping arrangements		
Supportive, thinks it natural	8	40
Neutral or indifferent	7	35
Not so supportive accepts unwillingly the mixed feelings, compromises	5	25
Someone advised against co-sleeping with the baby		
Doctor		
Yes	2	10
No	18	90
Others		
Doctors only	1	5
Japanese friends	4	20
American friends	2	10
Family or extended family	1	5
Others	2	10
None	10	50

The respondents used cribs in different ways. Twenty percent of the respondents never used cribs in the US. The other 20% used them for naps only. The other 20% used cribs attached to the respondents' beds. They said that they pulled their babies into the parental beds when the babies cried during the night and nursed their babies while lying down. All of those who used cribs in different rooms (3, 15%) reported that they quit using cribs and started co-sleeping around 10 to 12 months. Among those who had used cribs separately in the same room (4, 20%) the time when they started to share the same bed varies (2 months, 8 months, 14 months). The one who weaned her baby earliest at 6 months used a crib separately in the same room only until weaning and never shared the same bed with her baby.

Eighty percent of the respondents had slept in a different room from their husbands. Forty percent of the respondents still slept with their babies/toddlers in a different room from their husbands at the time of the interview. Fifty-five percent of the respondents employed family co-sleeping with their husbands and babies/toddlers at the time of the interview. Their husbands' attitude toward the co-sleeping arrangements was not very negative. Forty percent of the respondents reported that their husbands were supportive and thought it natural. Thirty percent of the respondents reported that their husbands were neutral or indifferent about the arrangement. The researcher tested the

correlation between the husbands' attitude and sleeping in a different room from their husbands at the time of the interview by a chi-square, but no significant relationship was found ($p = .45$, $df = 2$, $x^2 = 1.6$).

Half of the respondents had someone advise against co-sleeping with the baby. Ten percent of the respondents had their doctor advise against co-sleeping with the baby. Twenty percent of the respondents reported that such advice came from Japanese friends and 10% from American friends, only 5% from the family.

Nursing Patterns

As shown in Table 10, nursing patterns of the sample vary.

During the first months, 50% of the respondents nursed every two hours (or 10 to 12 times a day). Twenty percent of the respondents nursed every 30 minutes to 1 hour (more than 13 times a day) and another 20% nursed every 3 hours (7 to 9 times a day). Two (10%) used one formula feeding a day regularly in addition to breastfeeding.

Around the third month, 45% nursed 7 to 9 times a day. Twenty-five percent of the respondents still nursed every 2 hours (10 to 12 times a day) and 15% nursed more than 13 times a day. One mother still used one formula feeding a day in addition to breastfeeding. She reported that she had been afraid of a lack of milk because she could not see how much breast milk the baby

Table 10

Nursing Patterns Reported by the Sample (N = 20)

	1 Month		3 Months		6 Months		12 Months		Now	
	N	%	N	%	N	%	n=18	%	n=11	%
Nursing pattern										
Every 30 minutes to 1 hour (13 times-)	4	20	3	15	3	15	2	11.1	1	9.1
Every 2 hours (10-12 times)	10	50	5	25	4	20	1	5.6	1	9.1
Every 3 hours (7-9 times)	4	20	9	45	3	15	2	11.1	1	9.1
Every 4 hours (5-6 times)	-	-	2	10	7	35	3	27.3	2	18.2
3-4 times a day	-	-	-	-	2	10	8	72.7	4	36.4
Twice a day	-	-	-	-	-	-	1	5.6	1	9.1
Once a day	-	-	-	-	-	-	1	5.6	-	-
Once two days	-	-	-	-	-	-	-	-	1	9.1
Every 30 minutes to 1 hour	1	5	-	-	-	-	-	-	-	-
Every 3 hours (7-9 times) +1 formula	1	5	-	-	-	-	-	-	-	-
Every 4 hours (5-6 times) +formula	-	-	1	5	1	5	-	-	-	-
Night nursing										
Never	1	5	1	5	3	15	5	27.8	2	18.2
1-2 times	3	15	6	30	7	35	4	22.2	2	18.2
3-4 times	8	40	10	50	5	25	5	27.8	5	45.5
4-5 times	5	25	1	5	2	10	1	5.6	-	-
6-7 times	1	5	1	5	1	5	-	-	1	9.1
8-9 times	1	5	-	-	1	5	1	5.6	-	-
10 times	1	5	1	5	1	5	-	-	-	-
3 times + alpha Nurse by oneself	-	-	-	-	-	-	2	11.1	1	9.1

took. Later she stopped using formula because her baby refused it. She was nursing the toddler at the time of the interview.

Around the sixth month, the greatest number (35%) nursed 5 to 6 times a day. However, 20% still nursed 10 to 12 times, and 15% still nursed more than 13 times a day.

Around the sixth month, the greatest number (35%) nursed 5 to 6 times a day. However, 20% still nursed 10 to 12 times, and 15% still nursed more than 13 times a day.

Around the first birthday (N = 18), 72.7% nursed 3 to 4 times a day, and 27.3% nursed 5 to 6 times a day. Two (11.1%) still nursed more than 13 times, and one (5.6%) nursed 10 to 12 times. No mother used formula.

At the time of the interview, the greatest number (36.4%) nursed 3 to 4 times a day. There were still frequent nursers, too.

According to the respondents, the greatest number reported night nursing during the first month, 3 to 4 times (40%) or 4 to 5 times (25%). Around the third month, 50% of the respondents nursed 3 to 4 times a night and 30% nursed 1 to 2 times a night. Only one mother reported that her baby had never awakened at night since he was born. Around the sixth month, 35% nursed 1 to 2 times a night and 25% nursed 3 to 4 times a night. Although 15% of the babies slept through the night, there were still babies who nursed several times during the night. Around the first birthday, 14 out of 18 respondents reported nursing less than 4

times at night, but there were still babies who frequently nursed at night. One mother reported that she was wakened for only three nursings during the night, but her baby searched for her breasts and nursed by himself several times.

The respondents' thoughts about night nursing are shown in Table 11. Thirty percent of the respondents replied that breastfeeding made night nursing easier than formula feeding. Twenty-five percent thought that night nursing was a natural process to meet the baby's needs, and good for the baby. Twenty-five percent accepted night nursing as the mother's mission even though they felt sleepy. On the other hand, 20% thought it hard and not good for the mother. Only 10% answered that it was not good for the baby's character.

Health Professionals' Advice

The health professionals' advice reported by the sample is shown in Table 12.

Ninety percent of the respondents used Japanese-speaking doctors. Only 3 respondents (15%) said that their doctors were supportive of breastfeeding. They used four different Japanese-speaking doctors. The respondents' perception of the doctors seems highly subjective. For example, regarding the same doctor A, 20% of his clients (N = 10) rated him as supportive; 70% said he was just neutral, and 10% said that he was not supportive. One respondent said that she appreciated this doctor because he had

Table 11

Thoughts About Night Nursing Reported by the Sample[a]

	Number	Percent
Easier than formula if breastfeeding	6	30
Natural, the baby's need, good for the baby	5	25
Mother's mission, accept as necessity even though sleepy	5	25
Hard, not good for the mother	4	20
Not good for the baby's character	2	10

[a]Total exceeds 100% due to multiple answers.

Table 12

Health Professionals' Advice on Breastfeeding Reported by the Sample (N = 20)

Category Label	Number	Percent
Respondent's perception of doctors regarding breastfeeding		
Japanese speaking		
Japanese American doctors		
Dr. A		
Supportive	2	10
Neutral	7	35
Not supportive	1	5
Dr. B		
Neutral	4	20
Dr. C		
Supportive	1	5
Neutral	1	5
Dr. D		
Neutral	1	5
Not supportive	1	5
American doctors		
Dr. E		
Not supportive	1	5
Dr. F		
Neutral	1	5
Advice of scheduled nursing		
No less than 3 hours	3	15
No less than 4 hour	2	10
Don't remember the intervals but received advice	1	5
No advice	12	60
Avoided the topic, false report to doctor	2	10
Complaint about the advice of scheduled nursing (n = 6)		
Followed	1	16.7
Not followed	5	83.3

Table 12—Continued

Category Label	Number	Percent
Advice that conflicted with respondent's knowledge or beliefs (n = 10)		
Weaning	2	20
Supplement	2	20
Solid food	2	20
Other	4	40
Discussion with advisors (n = 10)		
Never discussed		
Knowledge or belief	6	60
Feelings	8	80
Discussed a little		
Knowledge or belief	4	40
Feelings	1	10
Discussed enough		
Knowledge or belief	0	0
Feelings	0	0
No negative feelings		
Knowledge or belief	-	-
Feelings	1	10
Action after advice against respondent's knowledge or beliefs (n = 10)		
Ignored	3	30
Discussed	3	30
Tried, followed	2	20
Accepted unwillingly	1	10
Ignored but accepted unwillingly later	1	10

[a]Total exceeds 100% due to multiple answers.

Table 12—Continued

Category Label	Number	Percent
Reasons for noncompliance (n = 5)		
Baby wants/needs more breast milk	3	60
Breastmilk digest earlier	1	20
Nurse more, produce more milk	1	20
Report to health professionals whether the respondent is still nursing a toddler (n = 14)		
Not tell	6	42.9
Tell	6	42.9
Not tell one, tell another	2	14.3
Reason to report or not to report toddler nursing to health professionals (n = 14)		
Asked or not asked	10	71.4
Do not need to tell or worry about being told something	4	28.6
Respondent received advice against her knowledge or belief from health professionals (n = 20)		
Doctor	7	35
Nurse in Japan	1	5
Nurse in US	1	5
Child birth instructor	1	5
None	10	50
Emotion felt by the respondent when she received advice against her knowledge or beliefs (n =10)[a]		
Doubtful	3	30
Angry	1	10
Anxious	3	30
Self-confident (advisor is ignorant)	1	10
No negative feelings	3	30

written an order for breastfeeding at the hospital upon her request, saying she could totally breastfeed. At the same time, other respondents said that the doctor was good at first but encouraged them to give their babies solid food early and discouraged long term nursing.

Thirty percent of the respondents were advised to use scheduled nursing, and 10% of the respondents either avoided the topic or lied to the doctors so that the doctors would not advise them. Reasons for noncompliance (N = 6) were "baby wants/needs more breast milk" (60%), "breast milk digests earlier" (20%), and "nurse more, produce more milk" (20%). Only one mother (16.7%) followed the doctor's advice because "baby drinks much at one time and can create rhythm of a daily life if interval of nursing is long." Some respondents (20%) said that they did not report toddler nursing to health professionals because they thought that they did not need to or were worried about being told something by the professionals. Of those who nursed toddlers (N = 14), 42.9% did not report it to health professionals.

Half of the respondents had received advice against their knowledge or beliefs from health professionals. Of those who had received such advice (N = 10), 70% came from doctors in the US. These respondents (N =10) felt anxious (30%), angry (10%), or doubtful (30%). Thirty percent of them felt no negative feelings, and 10% thought that the advisor was ignorant.

These questions about their feelings seemed extremely difficult for them to answer. Most of them confused feelings with thoughts and told the researcher what they thought. Some of them could not identify their feelings.

Mainly the advice concerned weaning (20%), supplements (20%), and solid food (20%). The majority (60%) never discussed their knowledge or beliefs and almost all (80%) of the respondents never discussed their feelings with health professionals. After receiving such advice, the respondents either "ignored" (30%), "discussed" (30%), "tried or followed" (20%), "accepted unwillingly" or "ignored at first but accepted unwillingly" (20%).

Formula

Although all the respondents chose breastfeeding during pregnancy, 35% of the respondents reported that their babies were given formula at the hospital. They felt bitter, angry, frustrated, anxious and shocked (Table 13).

Three respondents (42.9%) reported no negative feelings. One explained she thought it usual at that time. Another said that she had thought, "American formula must not be bad because other American babies are using." The third respondent denied that her baby had drunk much of it. She knew that her baby was given formula but believed that her baby had hardly taken it.

Table 13

Formula Use Reported by the Sample (N = 20)

Category Label	Number	Percent
Given at the hospital to the baby (n = 20)		
Yes	7	35
No	11	55
I don't know	2	10
Emotion respondent felt when her baby was given formula at the hospital (n = 7)[a]		
Bitter	1	14.3
Angry	1	14.3
Frustrated	1	14.3
Anxious	1	14.3
Shocked	1	14.3
No negative feelings	3	42.9
Missing	1	14.3
Where respondent received a sample of formula (n = 20)		
Hospital only	14	70
Hospital and doctor's office	2	10
Child birth class	1	5
Never	3	15

Table 13—Continued

Category Label	Number	Percent
Reason respondent used formula and thought/emotion when she received a sample of formula (n = 20)		
Never used formula	7	35
Thought/emotion when received a sample		
Never received formula	3	15
Didn't need	2	10
Interesting	1	5
Took it tentatively	1	5
Felt lack of milk supply	5	25
Thought/emotion when received a sample		
Relieved or lucky	2	10
No feeling	2	10
Anxious	1	5
Tried it out	4	20
Thought/emotion when received sample		
Didn't need	2	10
Took it tentatively	1	5
No feeling	1	5
Doctor told me to use	1	5
Thought/emotion when received sample		
No feeling	1	5
Other reasons	2	10
Thought/emotion when received sample		
Relieved or lucky	2	10

[a]Total exceeds 100% due to multiple answers

The respondent who felt shocked said,

> 'I did not recognize it was a formula at that time because the nurse explained it as necessity and I believed it was needed supplement for a low birth weight baby. When I noticed that it was formula later, I wondered why the nurse did not ask my permission. My doctor seemed to believe that breast milk could not be produced in the first few days at the hospital.'

The other respondent who felt angry and anxious about her ability to breastfeed said at the same time she was shocked with her cesarean birth, too, because she had believed that her baby would be born and nursed naturally. The other respondent who felt bitter and frustrated, wished she could have spoken English well. She blamed herself saying,

> 'I had told a nurse that I hoped to breastfeed. But the nurse gave formula. Maybe my English was not very well. I felt frustrated with my English ability for not being able to have enough communication.'

Formula distribution is frequently conducted at medical settings. Only 15% of the respondents had never received a free sample of formula. Seventy percent of them received it solely at the hospital. Ten percent received it both at the hospital and at their doctors' office. One (5%) received it from a doctor at the child birth class. When the respondents ($\underline{N}$ = 17) received samples of formula, most of them did not have negative feelings. Only one (5.9%) reported her anxious feeling. One mother mentioned that she did not refused it because she was attracted to other toys in the gift pack.

A slightly significant relationship was found between receiving a sample of formula at the hospital and the use of formula ($\underline{x}^2 = 3.5$, $\underline{df} = 1$, $\underline{p} = .06$). The researcher examined the relationship between the thought and emotion the respondents felt when they received a sample of formula and the later use of formula by a chi-square. A significant relationship was found ($\underline{x}^2 = 12.5$, $\underline{df} = 6$, $\underline{p} = .05$). Those who never used formula were more likely not to have received a sample of formula or to have felt they did not need it or felt it interesting. Those who felt anxious or relieved were more likely to use formula later.

Thirty-five percent of the respondents never used formula. Twenty-five percent of the respondents used formula because they felt a lack of their milk supply. Another 20% of the respondents said that they used formula just to try it out. All of those who "just tried" the formula had received a sample of formula at the hospital. One mother said that she used it because it was there. Those who had never received a sample of formula never used formula later (100%). One respondent, who had not received a sample at the hospital but used formula, had received a sample of formula at the child birth class. Those who had received formula were more likely to use formula (75%).

Breastfeeding Problems

The respondents had several breastfeeding problems. Their main problems were sore nipples (50%), engorgement (30%), and

plugged ducts (30%). The greatest number (45%) of the respondents reported that they overcame these problems by attending support group meetings, by referring to books (35%), by telephone counseling (30%), and consulting breastfeeding friends (25%). Twenty percent of the respondents reported that watching the babies, or letting time solve their problems. Ten percent of the respondents answered that their patience made them overcome the problems (Shown in Table 14).

Reasons not to Breastfeed

Various reasons were given by the respondents why some people did not breastfeed (Table 15).

Forty percent of the respondents thought some people "chose formula" because of convenience. Thirty percent of the respondents thought the reason was misunderstanding and lack of knowledge among some people. Thirty percent of the respondents thought that there were some people who did not have enough milk. Twenty-five percent of the respondents thought the reason was doctors who were not supportive or no supportive advisors. Other reasons were "social acceptance of formula" (10%), "medical reasons" (10%), "their fault or their lack of patience."

Feelings about Breastfeeding

The feelings the respondents have about breastfeeding are summarized in Table 16.

Table 14

Problems Related to Breastfeeding the Sample Had (N = 20)[a]

Category Label	Number	Percent
Problems		
Sore nipples	10	50
Plugged ducts	6	30
Engorgement	6	30
Allergies	4	20
Breast infection	3	5
Illness of the mother	3	15
Low milk supply	3	15
Illness of the baby	2	10
Jaundice	2	10
Mother's tiredness, cannot go outside	2	10
No rhythm of nursing	2	10
Used only one breast	2	10
Leaking	1	5
Biting	1	5
No knowledge of the art	1	5
Too much milk	1	5
Sucking problems	1	5
How respondent overcame problems (n = 20)		
Support group meetings	9	45
Books	7	35
Telephone counseling	6	30
Breastfeeding friends	5	25
Watched baby, let time solve	4	20
My patience	2	10
Doctor	1	5

[a]Total exceeds 100% due to multiple answers.

Table 15

Reasons the Sample Thinks Some People Do Not Breastfeed (N = 20)[a]

	Number	Percent
Their choice, convenience of formula	8	40
Their misunderstanding, lack of knowledge	7	35
Not enough milk	6	30
No supportive doctor, no supportive advisor	5	25
Social acceptance of formula	2	10
Medical reasons	2	10
Their fault, lack of patience	2	10
Don't know why	1	5

[a]Total exceeds 100% owing to multiple answers.

Table 16

Feelings the Sample Has About Breastfeeding

Sample	Feelings About Breastfeeding
A	It's time consuming and I have to choose certain jobs. But it can fulfill my feeling that my baby is only mine. Though I feel annoyed because of my current pregnancy and sore nipples, I believe that natural weaning can make child independent earlier because breastfeeding is a safety zone for a toddler.
B	Breastfeeding is best for both baby and mother. It is easy once baby can suck.
C	Breastfeeding is natural and good for mother, but I want to accept people who are not breastfeeding. I don't think that breast milk is everything.
D	I have wanted natural childrearing. Breastfeeding gives a special time for mother and baby. Nursing mother can see child's condition. I can take care of myself by keeping good nutrition. I am satisfied with natural weaning because I will not be able to get such a special time any more.
E	I am happy to see his happy face. Breastfeeding makes parenting easy. I don't need to watch time. Breastfeeding is accountable any time.
F	Nursing period is just one, two or three years compared to a long human life. Skinship and mother's affection influence baby's whole life. I think we can give more love to children if we breastfeed. I am satisfied that I did. Those who say that they have insufficient milk should make efforts. Maybe they cannot be relaxed. Problems might be their food or mental one. Just one month of breastfeeding is much better than nothing.

Table 16—Continued

Sample	Feelings About Breastfeeding
G	While I feel regret to admit it because I used formula for the first one, I think that breastfeeding is wonderful. I feel affection while nursing. This feeling is different from using formula. I wish I had nursed my first one. In Japan they say that non-breastfeeding mothers are not real mothers. There are many mothers who feel resistant to the statement. I felt same way, too. However, now I realize that many Japanese mothers fail to breastfeed because their surrounding people advised too much and mothers could not be relaxed. In US, it is better that I don't have such people. I just have a support group. I am happy, and proud of myself. Now I know the pleasure of mothering. I want to have one more child as soon as possible.
H	I feel satisfied that I can nurse according to natural rules and that baby could grow by my breast milk only. If leaving baby while mother's going out is the issue, you can ask other breastfeeding friend to nurse your baby. I feel warmly. I wish everyone could breastfeed. It will be good bonding and good memory even if they encountered bitterness and troubles.
I	I have never experienced happier feeling than feeling while nursing. It is so intense that I feel even jealous of others' nursing now. If I were younger, I would have many children and would breastfeed all.
J	Breastfeeding is very good for mutual communications with child. It is difficult to wean. It gives us benefit for trust and mother-child relationship.
K	I feel peaceful during nursing as baby grows. I became aware of being a mother as I watched myself nursing in the mirror. Whenever I saw him nursing, I felt affection, and thought about his future. Now I miss him because I had weaned and cannot nurse him while holding. I feel like being torn off a part of my body.

Table 16—Continued

Sample	Feelings About Breastfeeding
L	Just as baby was tied to mother by the placenta within the mother's tummy, he is tied mother by breastfeeding. It is pleasurable to see natural weaning from its tie.
M	Breastfeeding is normal and best for baby. There are no negative aspects for mothers, too. However, I cannot tell it to other (non-nursing) mothers because I am afraid that it might make them feel guilty. But I sent a book about breastfeeding to my cousin and now she is breastfeeding and it answers her concerns. I feel like making an ally.
N	I wish more people would breastfeed. Doctors need more knowledge of breastfeeding.
O	I am glad that I can breastfeed the second one, because I used formula for the first one. My husband told me that breastfed babies were wiser. I recognized that breastfeeding required strong will. I recommended a book about breastfeeding to my sister who had bottle-fed her first one. She breastfed her second one, too.
P	I feel satisfied with my decision to breastfeed. Breastfeeding can enhance skinship. I learn a lot from my child such as allergy and nutrition. I want to breastfeed the next one, too.
Q	Breastfeeding is good for a lazy person like me. Baby didn't suffer from illness. Breastfeeding could reduce the weight of mother. I want to breastfeed the next one, too.
R	I hope my child will have strong body through my breast milk. I know a middle-aged woman who has two children, one of whom breastfed and another of whom formula-fed. She said that breastfed one was more healthy and stronger after they grew up. Breastfeeding is a base that can raise children strong.
S	After people did not breastfeed, they lost many things.

All the respondents' feelings were positive. Most of them emphasized the benefits the mothers felt. "It can fulfill my feelings that baby is only mine." "Breastfeeding is best for both baby and mother." "Breastfeeding is natural and good for mother." "Breastfeeding gives a special time for mother and baby." "I am happy to see his happy face." "Skinship (an English word used in Japan to mean skin-to-skin contact that promotes bonding) and mother's affection influence baby's whole life." "I feel affection while nursing. This feeling is different from using formula. I am proud of myself." "I feel satisfied that I can nurse according to natural rules and that baby could grow by my breast milk only." "I have never experienced happier feelings than feeling while nursing." "It gives us benefit for trust and mother-child relationship." "Whenever I saw him nursing, I felt affection, and thought about his future." "Just as baby was tied to mother by the placenta within the mother's tummy, he is tied to mother by breastfeeding." "There are no negative aspects for mothers, too."

One respondent said that she wanted to accept the people who are not breastfeeding. Another respondent said that she could not tell other mothers the advantages of breastfeeding because she was afraid that it might make them feel guilty. However, 25% of the respondents said that they wished others could breastfeed too or actually recommended that someone breastfeed. Even the respondent who could not tell others the advantages of breastfeeding

reported she recommended breastfeeding to her extended family member and felt like making an ally.

CHAPTER 5
DISCUSSION

In this chapter the findings are discussed, conclusions are drawn, and recommendations are made for social work professionals and future research.

Choice of Breastfeeding and Support

While half of the respondents' mothers and one-fifth of their mothers-in-law helped with housework after the birth of the babies, 15% of the mothers and 25% of the mothers-in-law expressed their concern about the respondents' milk supply or suggested formula as a supplement during their stay. Some respondents reported to the researcher their struggle with their mothers or mothers-in-law regarding whether their babies should be given formula. Also, some (15%) reported the advice of weaning given by the family. These examples imply possible intergenerational conflicts. This finding was supported by the literature. According to Eguchi (1991), during the 1960s and 1970s, many mothers whose daughters gave birth had lost the art of breastfeeding and could not pass on Japanese traditional child rearing.

However, about half of this sample reported their mothers' and mothers-in-law's experiences of long term breastfeeding.

Entwisle et al. (cited in Kearney, 1988) said that mothers who were breastfed as babies were more likely to choose and succeed in breastfeeding. Kearney (1988) also reported that the attitudes of the babies' fathers regarding feeding are associated with the mother's choice of feeding method. It is possible that mothers-in-law's breastfeeding experiences positively affect the attitudes of husbands who were breastfed as babies. Although husbands were rarely reported to be the most influential persons on the respondents' choice of breastfeeding, the majority reported that their husbands were supportive to breastfeeding. According to Kearney (1988), "The help and understanding available to the mother during lactation crises from the culturally valued support person . . . will have great impact on the mother's coping strategies" (p. 102). The literature stated that the father in an Asian/Pacific family was the culturally valued head of the family and decision maker (Ho, 1987). However, the sample in this study listed the mother of the respondents as a more influential person than the husband or father of the respondents. In addition, when breastfeeding problems arose, the sample was helped outside of the family. It is interesting to note that the majority of the sample reported indifference or no comment from the fathers of the respondents or their fathers-in-law regarding the feeding choice. Although the male in the family might make decisions on other things, it can be said that the female makes decisions on childrearing related subjects, such as breast-

feeding. This is congruent with the Asian mother's culturally expected role of nurturing and caring for her children (Ho, 1987). While the majority of the sample chose breastfeeding as a matter of course, many of the respondents (35%) said that the child birth class greatly influenced their decision, too. This fact implies that breastfeeding education during pregnancy is also an important factor in the choice of breastfeeding.

All the mothers in the sample seemed to have enough breastfeeding support to continue breastfeeding at least for six months. Even if they did not attend the support group meetings, they had breastfeeding friends. This study was supported by Kaufman and Hall (1989) who report that the number of supports was the most influencial factor on the duration of breastfeeding.

Shand and Kosawa (1984) stated that Japanese mothers were more likely to have formal, impersonal, pre-packaged information and less likely to obtain information from lay people or para-professionals such as La Leche League member. These findings were not borne out by this study. While the sample had many breastfeeding problems, the majority could overcome them by using a support group. The importance of a support group was reported by a number of literatures (Shea, 1992; Silverman & Murrow, 1976; Turner, 1987).

Cultural Conflicts

The sample appears to preserve cultural practices, such as the use of self-massage and traditional foods for increasing the milk supply. The literature shows that breast massage has been a popular practice in Japan (Nono, 1985). Although professional massages were unavailable in the US, over one-third massaged their breasts for the purpose of lactation. The majority had heard of or believed that certain traditional Japanese food would help lactation. Only one respondent had heard that cow's milk and dairy products could increase breast milk production. While nutritional advice given to breastfeeding mothers in the US includes the use of cow's milk, many minorities including Asians suffer from pain, wind and diarrhea if they are forced to drink milk (Palmer, 1988; Riordan, 1983).

Over half of the respondents never felt shy when they were nursing in public or were not shy if they nursed discreetly even though half of the sample had received some kind of advice against nursing in public.

The respondents were not likely to confront authorities. Some of them tried to follow the health professionals' advice. However, if the respondents believed they were right, they just ignored professional advice, or if they noticed that the advice did not work with their babies, many stopped following the advice without discussing it with professionals. One mother said that she

was "more professional on breastfeeding than doctors." Another mother said that she did not report toddler nursing because this was not a medical issue. It is quite possible for mothers who do not have self-confidence to follow the health professionals' culturally biased advice, such as a short duration of breastfeeding and avoidance of co-sleeping even if it is not a medical issue. However, even for this sample who were more likely to have the self-confidence to continue breastfeeding, things were different if medical issues were involved. Twenty percent of the respondents reported that they stopped breastfeeding or used formula because of medication even though they were not necessarily told to stop breastfeeding by doctors. None of them asked for a second opinion about medication. Another respondent had to give up breastfeeding because the doctor insisted that her breast milk caused her baby's severe allergic reactions. Although breast milk is well known to prevent allergies, some doctors still believe that hypo-allergic formula is better for allergic babies. In her case, as discussed before, her baby was found to have an allergy to corn after a long use of hypo-allergic formula made of corn.

The sample also shows a long term duration of breastfeeding. This finding was not supported by Riordan (1983) who found that Japanese mothers tend to wean by one year because of the Western influence after World War II. Jushichiro Naito, MD, a proponent of the text of the Boshi Kenko Techo (the Maternal and Child Health

Handbook), advised scheduled nursing of babies older than three months, believed that late weaning was not good and suggested weaning around one year (Naito, 1990). Every pregnant woman receives the text along with the Boshi Kenko Techo from a municipal office. The researcher thinks that, therefore, public health stations usually guide mothers to wean babies around 1 year. Thirty percent of the respondents said that 12 months was the most desirable duration of breastfeeding, although none weaned at 12 months. It is interesting that some respondents said that they could nurse longer in the US than Japan because in the US they did not have "overkind" family or relatives who tended to advise to wean at 12 months.

Newton (1971) stated that unrestricted breastfeeding has been practiced in most non-industrial cultures. She included co-sleeping and late weaning as the norm in cultures practicing unrestricted breastfeeding culture. The literature said that unrestricted nursing was practiced before the industrial revolution even in the US (Caulfield & Hartford, 1952).

The use of unrestricted rather than scheduled nursing has the support of the literature. For example, Morelli et al. (1992) said that the Mayan families reported that night feedings were easy because they could breastfeed without waking when sharing the bed. Matsuda (1977) said that avoiding night nursing comes from Western couples' customs, not the infants' nature. In this research,

many Japanese mothers also reported that night nursing was natural (25%), easy (30%) and the mother's mission (25%). On the other hand, some mothers thought night nursing was hard (20%) and not good for the baby's character (10%). The Japanese mothers in this study are a little more westernized or industrialized than the Mayan mothers in the study of Morelli et al. (1992). However, the extent of acculturation seemed not to affect co-sleeping. This finding confirms what Caudil and Plath (cited in Montague, 1971; Morelli et al., 1992) had found that the Japanese co-slept with babies or toddlers.

More interestingly, this research reveals the separate sleeping arrangements of Japanese couples who breastfed or are breastfeeding their babies. Respondents, even those who were more acculturated, still chose to sleep with their babies or toddlers in a different room from their husband. Japanese couples' separate sleeping arrangement is supported by Caudi and Plath (cited in Morelli et al., 1992). Many couples continue the separate sleeping arrangement even after weaning the baby. This finding suggests to mental health professionals that they should not consider co-sleeping with a baby or sleeping separately from a husband to be a family problem in this population.

Formula

Results show that the majority of the respondents who chose breastfeeding received a sample of formula (70%) and some (35%) of their babies were given formula at the hospital. This study found

that those whose babies were given formula at the hospital felt bitter, guilty, and angry.

The distribution of formula and feeding babies with formula at the hospital contradict the WHO Code. The Code prohibits free samples of formula to be given to mothers and prohibits the promotion of formula through health care facilities (Palmer, 1988). It is quite possible that such a practice would interfere with breastfeeding. In addition, this study confirmed that receiving a sample of formula as a gift was strongly associated with the later use of formula.

Implications for Social Work

Social work professionals, who are supposed to be sensitive to cross-cultural issues, should be aware of the issues of breastfeeding, too. They should know that the Innocenti Declaration states that all societies should "empower all women to breastfeed . . . and children should continue to be breastfed . . . for up to 2 years of age or beyond" (WABA, 1993). The sample's feelings about breastfeeding show emotional commitment to breastfeeding, including how important breastfeeding is for them.

Sugarman (1989) addressed the psychosocial obstacles to breastfeeding success, such as the society's extreme focus on sexuality, a gift of formula at the hospital, uniformed medical advice which cognitively confuses breastfeeding with bottle-feeding, and negative comments from the family. It is notable that 30% of the

sample thought some people did not breastfeed because of misunderstanding and lack of knowledge and one fourth thought the reason was lack of supportive doctors or supportive advisors. Social workers should view such difficulties which breastfeeding clients face in the context of a different culture, which may not be supportive to breastfeeding ethnic minorities. They can advocate for their clients and consider taking social action. They also should be aware of a potential referral to a mutual help group, such as La Leche League, if they have breastfeeding clients. Gutierrez (1990) stated that the social worker could empower minority women by helping them to experience a sense of personal power within a small self help group. The use of a breastfeeding mutual help group is not only an important source of information and support during life cycle transitions (Silverman & Murrow, 1976), but can also be a strong means to empower minority mothers.

Above all, social workers should be familiar with co-sleeping and long term breastfeeding consonant with the cultural expectation of the client, especially if child abuse is the suspected issue. According to David Phillips, PhD, a clinical psychologist, some mental health professionals who were not aware of cross-cultural parenting practices interpret co-sleeping as incest or as a mother's attempt to avoid intimate and sexual issues in her marriage (Phillips, 1992). The bias against such culturally appropriate parenting behavior was also criticized by Sugarman (1989).

Implications for Future Research

The literature implied that Japanese childrearing practices foster interdependence (Morelli et al., 1992). Many experts in US mainstream culture think that co-sleeping interferes with the children's healthy psychological development (Morelli et al., 1992). Many health professionals are concerned that co-sleeping may foster dependency, may be sexually arousing, and may reflect poor limit setting (Schachter et al., 1989; Spock, 1957, 1976). These beliefs reflect the mainstream's cultural value of independence. It is also often said that co-sleeping may be physically dangerous for children. On the other hand, some studies suggested the low incidence of SIDS in some cultures where unrestricted breastfeeding and co-sleeping were common (McKenna, 1992; Sears, 1985). Future research will be needed to determine whether co-sleeping increases or decreases the risk of SIDS.

Caudi and Plath (cited in Morelli et al., 1992) attributed the reason of Japanese couples' separate sleeping arrangement to their other children's needs of co-sleeping. However, it is not clear in this study why the couples sleep in different rooms. Future study is needed regarding their motivation to sleep separately.

Conclusions

Breastfeeding has benefits not only for babies' physical and mental health, but also for the mothers'. When breastfeeding is

considered a woman's right, mother friendly workplaces, where mothers can work and breastfeed regardless of whether they work outside or at home with children, should be promoted.

Worldwide as societies become industrialized, there has been a significant decline in breastfeeding. This decline is believed to be correlated with a higher rate of infant mortality and a number of other threats to the health and welfare of infants. The role of commerce in promoting and marketing breast milk substitutes is believed to contribute strongly to low rates of breastfeeding, especially in developing nations and in low income communities in the US. The Surgeon General stated that increasing the breastfeeding rate and duration was an important objective for the future of the nation. Now many medical professionals support breastfeeding; many hospitals have changed their policy to be more supportive to breastfeeding, and mothers consider it a basic right for themselves and their babies (Lofton & Gotsch, 1983). However, social work professionals do not seem interested in these trends. While there have been several hundred articles about breastfeeding in professional journals of medicine per year, and an average of 25 articles per year in those of psychology, there was only one article related to breastfeeding in Social Work Research and Abstracts from 1988 to 1993.

This study found a unique breastfeeding practices in Japanese mothers in the South Bay area of Los Angeles. Knowing the psycho-

social obstacles to breastfeeding in the US can facilitate breastfeeding among ethnic minorities. It is reported the rate of breastfeeding among white upper socioeconomic class is increasing, while a few low-income minorities are reported to make an informed choice to breastfeed due to lack of education (Brown, 1988). Support group meetings and telephone counseling conducted in native languages might be suitable for other minorities. WIC can promote breastfeeding among ethnic minorities by using a peer support group, such as La Leche League Peer Counselor Program. The USDA says that at least $29 million could be saved annually in formula costs if WIC recipients would breastfeed for only one month (La Leche League International, n. d.).

Childrearing is different among different cultures. Breastfeeding is a primary issue of childrearing. The understanding of culturally appropriate childrearing practices, such as unrestricted nursing, late weaning, and co-sleeping may be needed among medical professionals as well as mental health professionals.

APPENDICES

APPENDIX A

ALCOHOL, CIGARETTES AND BREASTFEEDING

ALCOHOL, CIGARETTES AND BREASTFEEDING

Alcohol does pass through the milk to the baby. Breastfed babies whose mothers drink heavily sometimes do not gain enough weight, and their central nervous systems are affected. Yet generally speaking, when mothers drink moderately (two drinks or less per day), the amount of alcohol the babies receive has not been shown to be harmful. The use of alcohol has sometimes been suggested as a way to help mothers to feel relaxed and encourage their milk let-down reflex (La Leche League International, 1991).

Although there is conflicting information on nicotine and its effect on breastfeeding and it is listed as contraindicated by the American Academy of Pediatrics Committee on Drugs in "Transfer of Drugs and Other Chemicals into Human Milk," many experts believe it is better for a mother to breastfeed her baby even if she cannot quit smoking cigarettes. If the mother smokes less than a pack (20 cigarettes) a day, the amount of nicotine in her milk is about 0.5 mg per liter and is not usually enough to cause any problems for the baby. However, the more cigarettes a mother smokes, the greater the health risks for both her and her babies. Smoking is not good whether mothers breastfeed or bottle-feed. Second hand smoke causes many health problems in babies and children. Heavy smoking has been shown to decrease the milk supply; the milk will have a lower level of vitamin C, and on rare occasions the milk has caused symptoms in the breastfeeding baby such as nausea,

vomiting, abdominal cramps and diarrhea. Smoking just before or during nursing might inhibit the let-down reflex. If mothers do smoke, breastfeeding is very important because it will help protect their babies from getting sick so often (Mohrbacher & Stock, 1991; Wiggins, 1992).

APPENDIX B

HIV AND BREASTFEEDING

HIV AND BREASTFEEDING

The Center for Disease Control's (CDC) recommendation, reviewed in 1992, states, "If the woman is known to be HIV infected, she should be informed about the risks of HIV transmission through breast milk and counseled not to breastfeed" (cited in Chastain, 1993, p. 80).

The WHO/UNICEF joint statement in 1992 says that in developing countries where infectious disease and malnutrition are the main causes of infant death, even women who are HIV positive should breastfeed, but these women should not breastfeed in settings where a safe alternative feeding method is available (See Appendix C).

Van de Perre, P. et al. (1992) discuss the transmission of HIV through breast milk, which was proved based upon HIV positive infants breastfed by mothers who seroconverted HIV negative to positive after delivery. Although Espanol et al. (1992) raised the concern that seroconversion three months after delivery does not prove that infection occurred postnatally, Van de Perre, Hitimana, Dabis, Karita, and Lepage (1992) say that their study focused on seroconverting mothers based upon seroconversion rates observed in non-pregnant women and denied extrapolation to seroconverting mothers before delivery. The concern pointed out by Espanol, Caragol, and Bertran is not about the seroconverting mothers before delivery. Jelliffe and Jelliffe (1992) argue that the overstressed

transmission through breast milk is incomplete because Van de Perre et al. (1992) did not mention the recently demonstrated antiviral substances in ingested human milk and minimized the fact that vertical transmission, the main route of infection between mother and fetus, is well established. They say that the role of breastfeeding in the transmission of HIV-1 remains doubtful and at worst minuscule.

Riordan says that the majority of breastfed infants born to HIV-1 seropositive women remain uninfected. Although UNICEF, WHO, and CDC have established two different recommendations for mothers at risk for HIV infection that are based on environmental conditions, the recommendations do not address the "gray" areas; for instance, many US inner city areas qualify as "less developed" areas with poor sanitation not unlike that found in developing countries. Riordan thinks, "the recommendations may be a rush to judgment while the jury is still out" because new research points out the protective effects of antiviral elements in human milk and a possible 'blocking" factor in human milk (Riordan, 1993, pp. 3-4).

International Lactation Consultant Association (ILCA), American Society of Prophylactics Obstetrics (ASPO), and International Childbirth Education Association (ICEA)'s position paper statement on HIV states,

> Research indicates that breastmilk contains many specific and non-specific factors that may protect against HIV infection or influence the course of the disease. Hence we believe that priority should be given to assessing the apparently small risk

> of HIV transmission via breastmilk as well as the potential prophylactic or therapeutic uses of human milk. We also believe that advice to HIV-positive women should reflect the state of scientific knowledge rather than cultural prejudices and assumptions about the safety of artificial feeding. (1993, p. 81)

Kutner and Auerbach explain the ILCA stand by a statement "which urges that all recommendations to mothers reflect the body of scientific knowledge, which is growing rapidly, rather than upon assumptions based on incomplete and/or dated understandings" (1993, p. 81). They summarize the recent findings:

> 1. The study of Tovo et al. (cited in Kutner & Auerbach, 1993) note that antibody production of HIV-1 takes place within a few months of transmission and that pregnancy in a woman who is HIV positive may trigger HIV immune response in previously unresponsive carriers.
>
> 2. The study of Tozzi, Pezzotti and Greco (cited in Kutner & Auerbach, 1993) has found that vertically-infected infants (all born to HIV-positive women) showed much slower progression of the disease when they were breastfed and were more likely to survive longer than their agemates.
>
> 3. The study of De Martino et al. (cited in Kutner & Auerbach, 1993) in their appraisal of risk by breastfeeding, consider that risk to be small.
>
> 4. The study of Hirata et al. (cited in Kutner & Auerbach, 1993) reports that many children exposed to HIV in utero usually are HIV-negative six to nine months after birth. Of the group of mothers and babies that they followed, 13% of the bottle-fed babies (who were never breastfed at all) became HIV positive. Babies who were breastfed by their HIV-positive mothers for less than three months had sero-conversion rates slightly lower (9%) than their bottle-fed counterparts; only those infants breastfed longer than three months had higher rates (27 percent) . . . of seroconversion than the bottle-fed babies. (Kutner & Auerbach, 1993, p. 81)

This debate needs further studies. At this time,

> The known, documented health and emotional benefits of human milk and breastfeeding should be weighed against the known, documented health hazards of artificial infant feeding and the as yet unclarified risk of HIV transmission through human milk. (La Leche League International, 1992b, n. pag.)

LLLI supports mothers/parents in making informed infant feeding choices in consultation with their health care providers.

APPENDIX C

THE WHO AND UNICEF'S STATEMENT ON HIV AND BREASTFEEDING

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WHO/UNICEF recommendations about HIV:

1. In all populations, irrespective of HIV infection rates, breastfeeding should continue to be protected, promoted and supported.

2. Where the primary causes of infant deaths are infectious diseases and malnutrition, infants who are not breastfed run a particularly high risk of dying from these conditions. In these settings, breastfeeding should remain the standard advice to pregnant women, including those who are known to be HIV-infected, because their baby's risk of becoming infected through breast milk is likely to be lower than its risk of dying from other causes if deprived of breast-feeding. The higher a baby's risk of dying during infancy, the more protective breastfeeding is and the more important it is that the mother be advised to breastfeed. Women living in these settings whose particular circumstances would make alternative feeding an appropriate option might wish to know their HIV status to help guide their decision about breast-feeding. In such cases, voluntary and confidential HIV testing accompanied in all cases by pre- and post-test counselling could be made available where feasible and affordable.

3. In settings where infectious diseases are not the primary causes of death during infancy, pregnant women known to be infected with HIV should be advised not to breastfeed but to use a safe feeding alternative for their babies. Women whose infection status is unknown should be advised to breastfeed. In these settings, where feasible and affordable, voluntary and confidential HIV testing should be made available to women along with pre- and post-test counselling, and they should be advised to seek such testing before delivery.

4. When a baby is artificially fed, the choice of substitute feeding method and product should not be influenced by commercial pressures. Companies are called on to respect this principle in keeping with the International Code of Marketing of Breast-milk Substitutes and all relevant World Health Assembly resolutions. It is essential that all countries give effect to the principles and aim of the

International Code. If donor milk is to be used, it must first be pasteurized and, where possible, donors should be tested for HIV. When wet-nursing is the chosen alternative, care should be taken to select a wet-nurse who is at low risk for HIV infection and, where possible, known to be HIV-negative.

5. HIV-infected women and men have broad concerns, including maintaining their own health and well-being, managing their economic affairs, and making future provision for their children, and therefore require counselling and guidance on a number of important issues. Specific issues to be covered by counselling include infant feeding practices, the risk of HIV transmission to the offspring if the woman becomes pregnant, and the transmitted risk from or to others through sexual intercourse or blood. All HIV infected adults who wish to avoid childbearing should have ready access to family planning information and services.

6. In all countries, the first and overriding priority in preventing HIV transmission from mother to infant is to prevent women of childbearing age from becoming infected with HIV in the first place. Priority activities are (a) educating both women and men about how to avoid HIV infection for their own sake and that of their future children; (b) ensuring their ready access to condoms; (c) providing prevention and appropriate care for sexually transmission diseases, which increase the risk of HIV transmission; and (d) otherwise supporting women in their efforts to remain uninfected. (International Lactation Consultant Association, 1992, pp. 173-174)

APPENDIX D

FALSE ALARMS OF INSUFFICIENT MILK SUPPLY

FALSE ALARMS OF INSUFFICIENT MILK SUPPLY

False alarms of insufficient milk supply are as follows:

1. The baby nurses very often. Many babies have a strong need to suck or a need for frequent contact with their mothers. Frequent nursing assures that the babies is getting enough—not that there is a lack of milk.

2. The baby seems hungry an hour or so after being fed. Human milk digests more quickly than formula and places less strain on a baby's immature digestive system, so the breastfed baby needs to be fed more frequently than the formula-fed baby.

3. The baby suddenly increases the frequency and/or length of her/his nursing. Babies who are very sleepy as newborns often "wake up" at about two to three weeks of age and begin nursing more frequently. Babies also go through occasional growth spurts.

4. The baby is fussy. Fussiness can be caused by many things other than hunger. A baby cries and asks for nursing for several reasons.

5. The mother's breasts leak only a little or not at all. Leaking has no relationship to the amount of milk the mother produces.

6. The mother's breasts suddenly seem softer. This happens as the mother's milk production adjusts to her baby's needs and the initial breast fullness or engorgement subsides within the first few weeks.

7. The mother never feels the let-down, or milk-ejection reflex or it does not seem as strong as it did before. This may occur as time goes on. Some mothers do not feel a let-down at all, but they can learn to recognize that it is occurring by watching their baby's pattern of sucking and swallowing go from fast sucks with little swallowing to slow deep sucks and more frequent swallows.

8. The baby was weighed before and after a feeding and the mother was told her baby did not receive enough milk. Studies have shown that test weighing is not a reliable

indicator of whether a baby has breastfed well, because most baby scales are not sensitive enough to record such small changes in weight accurately.

9. The baby takes a bottle after nursing. Many babies will suck on a bottle even when they are full, because they like to suck. This is not necessarily a sign that the baby did not get enough at the breast.

10. The mother cannot express much milk. Milk expression is a learned skill that improves with practice. The amount of milk a mother is able to express is unrelated to her actual milk supply (Mohrbacher and Stock, 1991, pp. 22-23).

Growth spurts, periods of increasing nursing, commonly occur at around two or three weeks, six weeks, and three months of age. Since many mothers unfortunately do not know this growth pattern, they are likely to think their milk is not enough, and are likely to begin to use formula. More frequent nursing is the baby's way of building her/his mother's milk supply to meet her/his increasing needs (Mohrbacher & Stock, 1991).

APPENDIX E

CONSENT FORM

CONSENT TO PARTICIPATE IN COMMUNITY STUDY（コミュニティ・リサーチに協力する同意書）

You are being asked to participate in a community research study to conducted by Hiroko Hongo, a Master's Degree candidate at California State University, Long Beach--Department of Social Work. This sheet describes the study and tells you what you can expect if you choose to participate. Please read it carefully and ask any questions you may have. You may have a copy to keep if you wish.

（カリフォルニア州立大学、ロングビーチ校、社会福祉（ソシアル・ワーク）学科の修士論文の為、本郷寛子のコミュニティ・リサーチに協力していただくようにお願いします。この紙は、研究の内容についての説明と、もし協力していただける場合、どのようなことが予想されるかについて書かれています。よく読んで、質問があればお聞きください。もし希望があれば、この紙のコピーをお持ちになってください。）

Purpose of Research
（リサーチの目的）

The purpose of this research is to learn about the thoughts, feelings and practices regarding experiences of mothers over the age of 18 who were born in Japan, recently came to the US, and whose youngest child has been breastfed for at least six months.

（このリサーチの目的は、日本で生まれ、最近、アメリカに転居し、一番下の子供を少なくとも６か月以上母乳で育てた、または育てている、１８才以上のお母さんが、アメリカで母乳育児をされるにあたって経験されたこと、母乳育児に関する考えや感じたことを教えてもらう事にあります。）

What is Expected of Study Participants
（協力していただく方の予想されること）

You will be interviewed for one to two hours concerning your breast-fee ing experiences. The interview will be recorded in written Japanese to accurately report the information you give me.

（あなたの母乳育児の経験に関して、１時間から２時間、インタビューさせていただいて、その内容を正確に記述するため、日本語で記録を取らせていただきます。）

Risk and benefits of Participation
（協力の損得について）

No significant risks to your physical or mental health are anticipated as a consequence of participation in this study, but because of some sensitive or personal questions,some discomforts are possible. You may benefit from participating by exploring and expressing feelings and thoughts you had experienced. The information you give me will be helpful to understand Japanese breastfeeding families. You will have opportunity at the conclusion of the interview to ask questions and report any concern you may be feeling. Referrals to a breastfeeding support group, and individual counseling will be made availableto you, if you so desire. Although you will not be paid for your time, copies of the results can be made available to you upon request.

（この研究に協力することで、心身に害を及ぼす危険はありませんが、人によっては、少し突っ込んだ個人的な質問に当惑することもあるかもしれません。逆に、協力することによって、自分の考えや感じたことと深く考え、それを表現することは、あなたにとってもプラスになるかもしれません。あなたのくれる情報は、母乳育児をしている日本人家庭を理解する手助けになるでしょう。インタビューの後で、質問をしたり、あなたが抱いている心配ごとを話す機会もあります。もしあなたが希望すれば、母乳育児のサポート・グループや個人のカウンセリングを紹介することもできます。
あなたの費やした時間に関して金銭的な謝礼はありませんが、研究の結果は、もしリクエストがあればお知らせします。）

Confidentiality
（秘密厳守）

Your identity will remain completely confidential and will not be released to anyone, including La Leche League. Your interview questionnaire and research records will be identified only with your research ID number. The consent form containing your name and ID number will be kept in a locked file. You will never be identified by name in any reports of the results of this research. Personal information about you will be destroyed as soon as the study has been concluded; your consent form will be retained for three years after the study is over and then it will be destroyed.

（あなたの身元は完全に秘密にされ、ラ・レーチェ・リーグを含め、誰にもわかることがありません。あなたのインタビュー質問と記録は、リサーチのＩＤナンバーのみで確認されます。あなたの名前とあなたのリサーチＩＤナンバーの書いてある同意書は、鍵をかけたファイルに保存されます。あなたの個人的情報は、この研究が終り次第破棄し、同意書は三年ののち破棄します。）

Voluntary Nature of Participation
（協力するか、しないかの自由）

Participation in this research is entirely voluntary. You are free to continue participating or to drop out of this interview at any time without penalty. Failure to complete all phases of the study will no way jeopardize your eligibility for any services or benefits to which you may be otherwise entitled.

（このリサーチに協力するか、しないかは、全く自由です。協力を続けても、いつ途中で止めても自由です。止めたからといって、何の罰則もありません。この研究のすべてに完全に協力しなかったからといって、あなたが、母乳育児のサポート・グループやカウンセリングなどの恩恵を受けられなくなるということは、全く在りません。）

Who to Contact for More Information
(もっと情報が欲しい場合の連絡先)

for more information regarding any aspect of this study, you may contact either the researcher, Hiroko Hongo, (310)***-**** or the thesis advisor, Elizabeth T. Ortiz,D.S.W., (310)***-****. If you have any questions about research subjects' right, contact the Office of University Research at California State University, Long Beach, (310)985-5314.

(この研究について何か質問があったら、リサーチャーの本郷寛子 (310)***-****か、修士論文アドバイザーのエリザベツ T. オーティース博士 (310)***-****までご連絡ください。 また、協力者の権利についてのお問い合わせは、カリフォルニア州立大学ロングビーチ校のユニヴァーシティ・リサーチ事務所 (310)985-5314まで。)

I have read the information contained in this consent document. The risk andbenefits of this research have been explained to me and my questions have been answered. I understand its contents, and agree to participate in this study under the conditions described.

(この同意書にかかれた情報を読みました。このリサーチに協力することの損得の説明もされ、質問にも答えてもらいました。わたしは、その内容を理解し、その条件のもとでこの研究に協力します。)

Signature of Participant	Date
(協力者の署名)	(年月日)

Signature of Researcher	Date
(リサーチャーの署名)	(年月日)

APPENDIX F

QUESTIONNAIRE

I would like to ask you about your experiences regarding your youngest breastfed child.

I. CHOICE OF BREASTFEEDING

1. What is the strongest reason why you chose breastfeeding?
2. Who influenced your choice to breastfeed most?
3. How did you get breastfeeding information during pregnancy?

II. SUPPORT SYSTEMS

4. How have you gotten breastfeeding information after the birth?
5. Does your family support your choice?
6. How many breastfeeding friends do you have?
7. Do/did you have a support group?
8. If yes, when did you start to use the support group?
9. How often do/did you use the support group?

III. WEANING

10. At what age did you introduce solid food?
11. How long do you think is a desirable duration of breastfeeding? Why?
12. How long did you nurse? Why?
13. How long do you expect to? Why?
14. If you weaned already, why did you wean?

IV. NURSING PATTERN

15. How often did you nurse during the first month?
16. How often did you nurse around three months?
17. How about around six months?
18. How about around one year?
19. How about now if you are nursing?

V. DIET

20. Do/did you have particular foods you avoid?
21. Why do/did avoid it?
22. Do you know certain food that help to produce milk? What?

VI. MASSAGE

23. Do/did you have someone who massages your breasts for the purpose of lactation? Who?
24. Have you felt worried about your milk supply without massage?
25. Have you massaged your breasts for the purpose of lactation?
26. Who advised you to massage your breasts?

VII. NIGHT NURSING

27. How often did you nurse at night during the first month?
28. How often did you nurse at night around three months?

VII. NIGHT NURSING (cont'd.)

29. How often did you nurse at night around six months?
30. How often did you nurse at night around one year?
31. How often do you nurse at night if you are nursing?
32. How do you think about night nursing?
33. Have you get advice against night nursing from health professionals (doctor, dentist, etc.)? Who?

VIII. DOCTOR

34. How supportive is/was your doctor?
35. How does your doctor advise you about breastfeeding practice?
    1. Suggestion of the use of supplement (except vitamins and fluoride) when the baby was less than 4 months
    2. Did you follow his/her advice? Why?
    3. Suggestion of the use of vitamins and/or fluoride
    4. Did you follow his/her advice? Why?
    5. Did your doctor advice you scheduled nursing?
    6. Did you follow his/her advice? Why?

IX. FAMILY CO-SLEEPING

36. Have you shared the same room with your baby?
37. Do you use a crib?
38. Have you shared the same bed with your baby?
39. What is your husband's attitude about it?
40. Have your husband sleep in the different room from yours?
41. Does someone advise against your sleeping with the baby in the same bed and/or room?

X. NURSING IN PUBLIC

42. How do you feel about nursing in public?
43. Have you been advised against nursing in public? Who?
44. What place do you usually use to nurse outside your home?

XI. BARRIERS AND FEELINGS

45. What will/did you do if your doctor/dentist tells you to stop nursing?
46. How do/did you feel when the doctor/dentist tells you to stop nursing?
47. How do/did you feel if non-professionals tell you to stop nursing?
48. Have you been criticized or received advice against your knowledge or belief other than nursing frequency, sleeping arrangements, or night nursing from health professionals? If so, from whom, about what?
49. How did you feel?
50. Have you talk to your health professionals about your knowledge or belief?
51. Have you discussed about your feelings?

XI. BARRIERS AND FEELINGS (Cont'd.)

52. What did you do?
53. If you are nursing toddlers, do you tell health professionals that you are still nursing? Why?
54. Have you been criticized or received advice against your knowledge or belief other than nursing frequency, sleeping arrangements, or night nursing from non-health professionals? If so, from whom, about what?
55. How did you feel?
56. Have you talked to him/her about your knowledge or belief?
57. Have you discussed about your feelings?
58. What did you do?
59. Was your baby given formula in the hospital?
60. How did you feel?
61. Did you receive a sample of formula?
62. How did you feel?
63. Have you used formula? Why?
64. How did you feel?
65. Why do you think some people do not breastfeed?

XII. BREASTFEEDING PROBLEMS

66. Have you have any problems related to breastfeeding?
67. How did you overcome them?

XIII. FEELING ABOUT BREASTFEEDING

68. How do you feel about breastfeeding?

THE DEMOGRAPHIC AND ACCULTURATION LEVEL QUESTIONS

1. How old is your youngest child?
2. How many other children do you have?
3. Were all breastfed more than six months?
4. Who was born in Japan?
5. How old are you?
6. How much education do you have?
7. Do you have your car?
8. How many bedrooms do you have in your house/apartment?
9. How many years have you lived in the US?
10. Is your husband Japanese? If not, what ethnicity?
11. Does your doctor speak Japanese?
12. Did your mother breastfeed you? How long?
13. How about your mother-in-law's experiences? How long?
14. Did your mother come to help you from Japan? How long?
15. Did your mother-in-law come to help you? How long?

THE DEMOGRAPHIC AND ACCULTURATION LEVEL QUESTIONS (cont'd.)

16. Who else helped your houseworks after baby's birth?
17. Do you do paid work?
18. When did you resume to work?
19. How many times have you hired a baby sitter during the first year?
20. Do you express your milk for the baby, or use formula when you used a baby sitter?
21. How many close American friends do you have?
22. How many close Japanese friends do you have?
23. Are you aware of any Japanese speaking services for family problems?
24. Which one have you heard of?
25. Do you know anyone who used the services?
26. How fluent do you speak English?
27. How fluent do you read English?
28. How fluent do you write English?

APPENDIX G

CALCULATION OF INDEX

CALCULATION OF INDEX

The Breastfeeding Support Index = Total score of the following:

Mother's or mother-in-law's breastfeeding experience
No, NA = 0, 'less than 1 year' = 1, 1 year = 2,
1 year and half = 3, More than 2 years = 4
Breastfeeding Support Group
Have = 2, Only for the first one = 1, No = 0
How the Support Group was used
Telephone only = 1, Attended meeting once = 2,
Attended it 2-3 times = 3, Attended more than 4 = 4
The number of breastfeeding friends
'10-' = 4, '6-9' = 3, '3-5' = 2, '1-2 '= 1, 'None' = 0
La Leche League member
Member = 2, Used to = 1, Never = 0
Family Support of the Choice of Breastfeeding (Husband, mother, father, mother-in-law, father-in-law, other family)
Support = 2, Indifferent = 1, NA = 1,
Negative comment on milk supply = 0

The General Support Index = Total score of the following:

Mother's or mother-in-law's help after birth
Yes = 1, No = 0.
The number of Japanese friends
'10-' = 5, '6-9' = 4, '4-5' = 3, '2-3' = 2, '1' =1, None = 0.

The Acculturation Index = The total score of the following:

The place the baby was born
Both in US = 3, Only child born in US = 2,
One born in Japan = 1, Only one born in Japan = 0
Stay in the US
'Less than 2 years' = 1, '2-3 years' = 2, '3-4 years' = 3,
'4-5 years' = 4, '5-9 years' = 5, 'More than 10 years' = 6.
Husband's ethnicity
'Japanese' = 0, 'Japanese-American' = 1
'Other Asian' = 2, 'White' = 3
Close American friends
None = 0, '1' = 1, '2-3' = 2, '4-5' = 3, '6-9' = 4,
'10-' = 5.
English fluency (Speak, write, read)
Never = 0, A little = 1, 'So-so' = 2, 'Fluent' = 3,
Completely fluent = 4.

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